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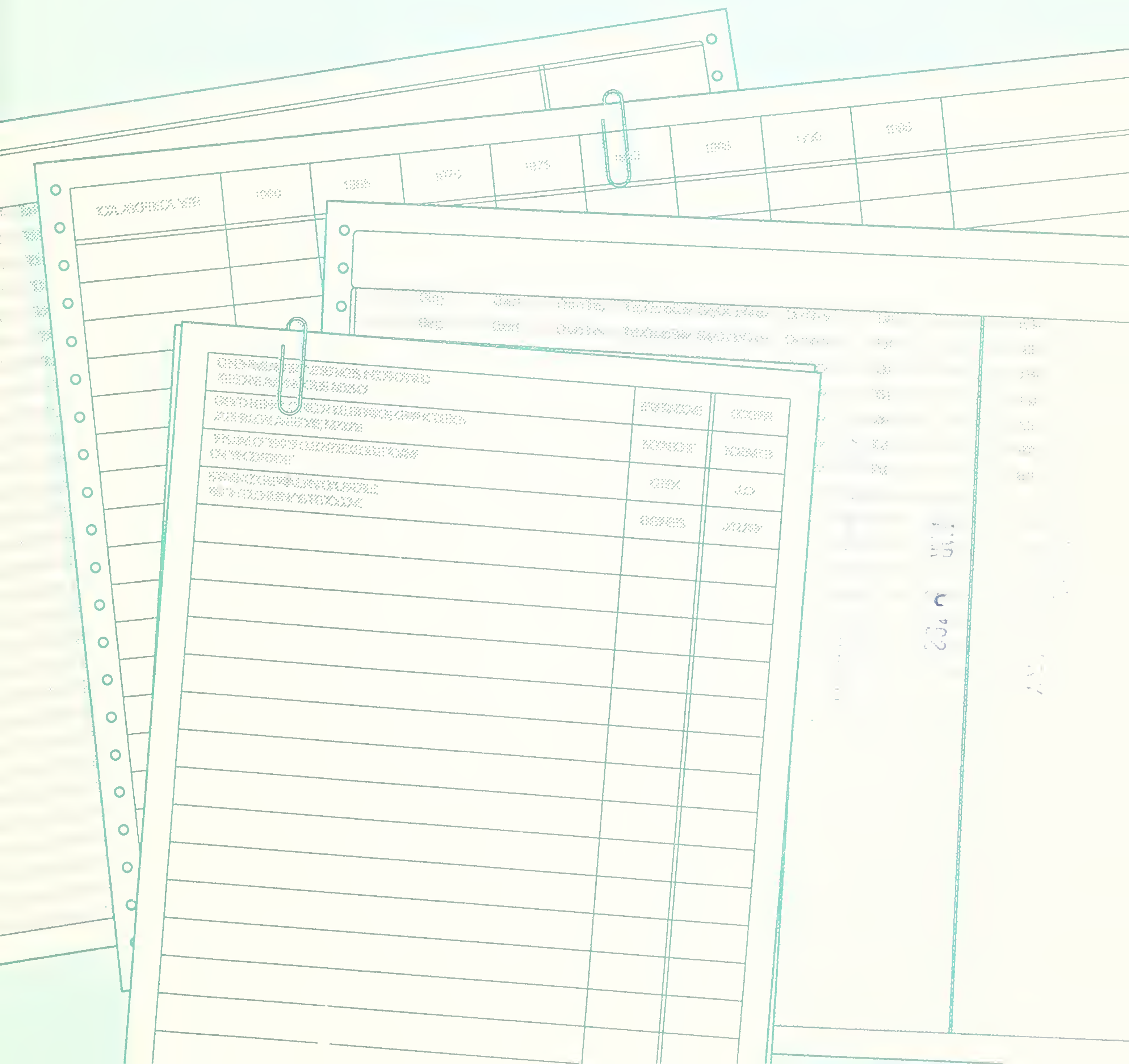
Farmer Cooperatives Financial Profile, 1987



Abstract

Farmer Cooperatives' Financial Profile, 1987

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Results of the latest financial profile study of U.S. farmer cooperatives are reported. The study is based on a survey of the financial characteristics of farmer cooperatives at the end of their 1987 fiscal years. Useful financial information is provided to cooperative managers, directors, educators, and others interested in cooperatives' financial performance and practices. Specifically, this report analyzes the distribution of net margins and losses, per-unit capital retain deductions, financial structure, composition of equity capital, and sources of borrowed capital. Financial ratio analysis is conducted to analyze the general financial condition of cooperatives. Cooperatives are classified by principal product or function, major function, asset size, and farm credit district.

Key Words: Cooperatives, financial structure, balance sheet, equity capital, borrowed capital, ratio analysis, net margins, per-unit capital retains.

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Preface

This publication reports the results of the latest comprehensive financial profile study of farmer cooperatives in the United States conducted by Agricultural Cooperative Service (ACS) and predecessor agencies of the U.S. Department of Agriculture. It is based on a survey of the financial characteristics of farmer cooperatives at the end of their 1987 fiscal years. Previous financial profile studies have been based on data collected for the fiscal years 1954, 1962, 1970, and 1976. The need for the present report stems from the large operating losses experienced by many cooperatives in the early 1980's and the significant restructuring that has occurred since the 1970's, which were characterized by high rates of growth and return.

The purpose of this report is to provide useful financial information to cooperative managers and directors, so that they can compare their cooperatives' financial performance and practices with those of other cooperatives, and to cooperative educators and others interested in cooperative finance. The value of this study is based on the willingness of members of the cooperative community to respond to the survey. Their time and effort are greatly appreciated.

This study differs from previous financial profile studies in that it uses a new cooperative classification system designed to produce more meaningful information and it contains additional analysis by size of cooperative and using financial ratios. Comparisons with earlier financial profile studies are made wherever possible. Some earlier financial profile studies included separate analysis of the 100 largest U.S. cooperatives. Because an analysis of the 100 largest cooperatives is currently published by ACS on an annual basis, it is not duplicated in this study.

A study of this scope depends by necessity on the efforts of a great number of individuals. Our sincere thanks go to Michael Kane, Beverly Rotan, Bruce Swanson, and James Wadsworth for the major contributions they made to this study during the survey editing stage; to Ralph Richardson, John Stutzman, Celestine Adams, Katherine DeVille, and Rachelle Sanders, members of ACS's Statistics and Technical Services Staff, for computer support and editing assistance; to Donald Davidson for assistance in assembling data on the 100 largest cooperatives; to John Mengel for assistance in editing dairy cooperative surveys; and to Bradley Pafford of the National Agricultural Statistics Service for his work in designing the sample used in the study.

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Highlights

This report provides detailed information on operational sources of equity capital and the financial structure of 4,573 U.S. farmer cooperatives for fiscal year 1987. Cooperatives are classified by 14 principal products or functions; major function (marketing, farm supply, and marketing/farm supply); size; and farm credit district.

Total assets amounted to $27.6 billion, compared with $18.6 billion in 1976. Total assets after eliminating intercooperative investments of $2.8 billion were $24.8 billion in 1987.

In 1987, cooperatives earned $1.49 billion in net margins after deducting net losses, compared with $1.84 billion in 1976. Patronage refunds from other cooperatives accounted for $62.1 million of net margins. A total of 3,780 cooperatives reported combined net margins of $1.57 billion. Six hundred and twenty-eight cooperatives reported combined net losses of $86.6 million. One hundred and sixty-five cooperatives reported no net margins or losses. These included cooperatives operating on a pooling basis.

Net margins were distributed as follows:

Method of distribution	*Percent*
Dividends on patron equity	1.5
Patronage refunds:	
Cash	32.6
Noncash allocations	30.6
Unallocated earnings	27.4
Income taxes	7.9
Total	100.0

Comparison of these results with those for other years indicates a substantial decrease in the proportion of net margins distributed to patrons as patronage refunds and a significant increase in unallocated earnings.

About four-fifths of net losses was charged to unallocated equity accounts, compared with about one-half in 1976. About a fourth was charged to patron equity accounts, compared with a third in 1976. Only a small fraction of net losses were charged directly to patrons, compared with a seventh in 1976.

In fiscal 1987, a total of 253 cooperatives deducted combined per-unit capital retains of $194 million, compared with $129 million in 1976. Most per-unit capital retains were deducted by cooperatives marketing fruits, vegetables, and nuts and cooperatives marketing dairy products. Few farm supply cooperatives made deductions.

In 1987, cooperatives held 52.7 percent of their assets as current assets, 31.8 percent as fixed assets, and 15.5 percent as other assets, including investments in other cooperatives. These proportions did not change significantly since 1976. Current and term liabilities, respectively,

equaled 35.6 percent and 18 percent of assets. Equity capital financed 46.4 percent, compared with 41.7 percent in 1976. Most of the increase in equity was compensated by a decrease in current liabilities.

Cooperatives held $12.8 billion in equity capital in 1987, compared with $7.7 billion in 1976. Equity capital, after eliminating intercooperative investments, equaled $10 billion in 1987. Of total equity capital, 79.3 percent was allocated to patrons, compared with 84.9 percent in 1976. The 20.7 percent of equity capital not allocated to patrons represented the highest proportion of unallocated equity since 1954.

In 1987, a total of 3,160 cooperatives held combined borrowed capital of $7.3 billion, compared with $6.1 billion in 1976. Borrowed capital provided 26.3 percent of cooperative financing, compared with 33.1 percent in 1976.

Borrowed capital was provided by the following sources:

Source	*Percent*
Banks for Cooperatives	51
Commercial banks	8
Bonds and notes	15
Other sources	26
Total	100

The share of borrowed capital provided by Banks for Cooperatives (BCs) in 1987 fell from 62.2 percent in 1976. Other sources, which included industrial development bonds and capitalized leases placed by BCs increased from 9.4 percent.

The following financial ratios were calculated to assess the general financial condition of cooperatives:

Ratio	*1976*	*1987*
Current	1.38	1.48
Debt/equity	1.40	1.16
Interest coverage	5.38	3.28

The current and debt/equity ratios show a general strengthening in balance sheets. The interest coverage ratio indicates a deterioration in the ability of cooperatives to make interest payments as a result of comparatively lower earnings and higher interest rates.

These highlights are based on average data. There is significant variation in the income and financial structure of cooperatives among various product and function groups, regions, and size categories.

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INTRODUCTION

This publication reports results of the latest comprehensive financial profile study of farmer cooperatives in the United States. This study was conducted by Agricultural Cooperative Service (ACS), U.S. Department of Agriculture. The report is based on a survey of the financial characteristics of farmer cooperatives at the end of their 1987 fiscal years. The purpose of this report is to help cooperative managers and directors assess their cooperatives' financial performance and practices and to provide researchers, educators, and others information on how cooperatives are financed and how this has changed.

Specifically, this report provides information on: (1) the distribution of net margins, (2) the distribution of net losses, (3) per-unit capital retain deductions, (4) condensed balance sheets, (5) borrowed capital and other liabilities, (6) allocated and unallocated equity, (7) sources of borrowed capital, and (8) current, debt/equity, and interest coverage ratios, as well as background information on the distribution of cooperatives according to sales, total assets, and farm credit district.

In presenting this information, cooperatives are categorized by principal product or function, major function, size, and farm credit district. When comparable information from prior financial profile studies exists, this information is presented with the data for 1987.

Relationship to Other Studies

Previous financial profile studies of U.S. farmer cooperatives were based on data for cooperative fiscal years ending in 1954, 1962, 1970, and 1976 [1-4]*. In addition to these studies, Agricultural Cooperative Service conducts annual financial profiles of the 100 largest farmer cooperatives [5]. These cooperatives generally represent more than 50 percent of total sales and assets. ACS also collects and publishes yearly statistics on the number, membership, and business volume of farmer cooperatives including basic net income and balance sheet information [6].

This study is an update of the ACS financial profile studies of farmer cooperatives. It differs from previous financial profile studies in that it uses a new cooperative classification system designed to produce more meaningful information, and it contains additional analyses using size of cooperative and financial ratios. In the new classification system, cotton, grain, and farm supply cooperatives are separated by function within each type. Also, large diversified cooperatives are in a separate classification. Comparisons with earlier data are not made for cooperatives classified by principal product. However, comparisons by major function are made whenever comparable earlier data exist.

Earlier financial profile studies included a separate analysis of the 100 largest farmer cooperatives. Currently, this analysis of the 100 largest cooperatives is done on an annual basis, so it is not duplicated here. Instead, an analysis by size of cooperative is presented.

Basic net income and balance sheet data presented in this study are similar to those published in ACS's annual farmer cooperative statistics [6]. However, those data differ from those included in this study because a different cooperative classification system is used. In addition, aggregate information differs because this study excludes some of the smaller bargaining, livestock shipping, and wool pool associations included in that study.

Cooperative Classifications

Two classification systems were used in this study to group cooperatives by commodity or function. In analyzing 1987 data along specific commodity or functional lines, cooperatives were grouped by principal product or function. To compare 1987 data with earlier data along

*(Numbers in brackets refer to publications cited in References section.)

broad functional lines, cooperatives were grouped by major function.

Principal Product or Function

The following classification system was used in grouping cooperatives by principal product or function:

Cotton marketing—Cooperatives primarily involved in marketing cotton and cotton products.

Cotton ginning—Cooperatives primarily involved in ginning cotton.

Dairy—Cooperatives primarily involved in marketing or processing milk.

Fruits, vegetables, and nuts—Cooperatives primarily involved in marketing or processing fruits, vegetables, or nuts.

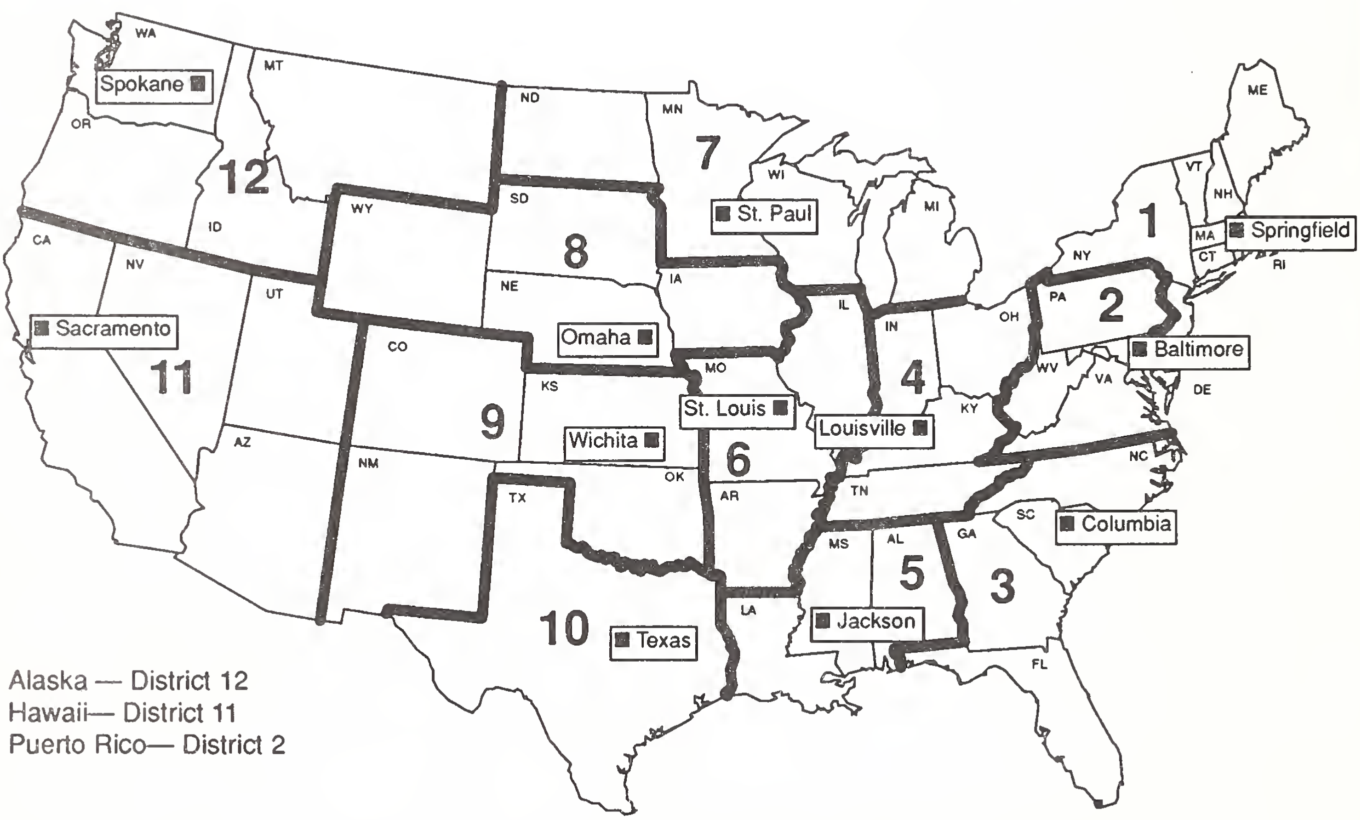
Regional grain—Cooperatives that are primarily involved in marketing or processing grain, rice, or soybeans and that serve a wide geographical area consisting of many counties, a State, or larger area. Does not include cooperatives primarily engaged in drying rice.

Local grain—Cooperatives that are primarily involved in marketing grain, rice, or soybeans and that serve a geographical area consisting of a local area, community, or small number of counties. Includes local grain marketing cooperatives with farm supply activities not exceeding grain marketing sales volume.

Sugar—Cooperatives primarily involved in marketing or processing sugar or sugar products.

Livestock, wool, and poultry—Cooperatives primarily involved in marketing or processing

Figure 1—Farm Credit Districts and District Banks for Cooperatives [1]



Alaska — District 12
Hawaii— District 11
Puerto Rico— District 2

[1] In 1988, the Banks for Cooperatives were reorganized from a district structure to a new system with three banks, each authorized to operate nationally.

livestock, wool, or poultry and products.

Miscellaneous marketing—Cooperatives primarily involved in marketing or processing commodities not otherwise classified. Includes dry edible beans and peas, tobacco, and miscellaneous products.

Interregional manufacturing—Cooperatives that are primarily engaged in the manufacture of farm supplies and that serve a membership consisting primarily of regional cooperatives.

Regional farm supply—Cooperatives that are primarily involved in the distribution of farm supplies and that serve a wide geographical area consisting of many counties, a State or larger area.

Local farm supply—Cooperatives that are primarily involved in the distribution of farm supplies and that serve a geographical area consisting of a local area, community, or small number of counties. Includes local farm supply cooperatives with grain marketing activities not exceeding farm supply sales volume.

Service—Cooperatives that primarily provide trucking, storage, grinding, drying, or similar services related to marketing or farm supply activities. Includes cooperatives primarily engaged in drying rice.

Large diversified—Large multiproduct cooperatives engaged in both substantial marketing and farm supply activities.

The dairy; fruits, vegetables, and nuts; and sugar classifications include their respective bargaining associations. However, small bargaining associations with few assets and little or no allocated equity are not included in this study. Livestock shipping and wool pool associations also are not included.

Major Function

The following classification system was used for grouping cooperatives by major function:

Farm supply—A cooperative with farm supply business accounting for at least 75 percent of its total dollar sales volume.

Marketing—A cooperative with marketing business accounting for at least 75 percent of its total dollar sales volume.

Marketing/farm supply—A cooperative with both farm supply and marketing business, each of which account for between 25 and 75 percent of total dollar sales volume.

Service cooperatives are included in the farm supply group. The criteria used in this classification system are essentially the same as those used in the 1976 financial profile study.[1]

For the purpose of grouping cooperatives geographically, the 12 farm credit districts were used.[2] These and the 12 corresponding district Banks for Cooperatives (BCs) are illustrated in figure 1.[3]

Methodology

Questions on the distribution of net margins and losses, patronage refunds received from other cooperatives, per-unit capital retain deductions, and balance sheet items were designed for inclusion in ACS's annual statistical survey of farmer cooperatives for fiscal years ending in 1987. The survey questionnaire was mailed to all organizations identified by ACS as meeting the definition of a farmer cooperative.[4]

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[1] Some subjective classifications of cooperatives were made in the 1976 study. That study also included comparisons between 1970 and 1976 data, although the 1970 study used a two-thirds/one-third criterion for determining how cooperatives were classified by major function.

[2] In 1988, the Banks for Cooperatives were reorganized from 12 district banks and one central bank to three banks. The reorganized banks are authorized to operate nationally. Therefore, the districts reported in this report are no longer operational. For comparison with earlier studies, the historical districts are retained in this report.

[3] Differences in the results reported for these districts should not be interpreted as reflecting the lending policies of individual BCs. Differences among districts result in part from geographical differences, the lending policies of other lenders, and the performance of individual cooperatives.

[4] For inclusion, a cooperative is defined as one that meets the following requirements: (1) farmers or agricultural producers hold the controlling interest in the cooperative; (2) no member of the cooperative is allowed more than one vote because of the amount of stock or membership capital owned, or the cooperative does not pay dividends on stock or membership capital in excess of 8 percent a year, or the legal rate in the State, whichever is higher; and (3) the cooperative does not deal in products of nonmembers in an amount greater in value than it handles for its members.

Nonrespondents were followed up with additional mailings.

Appendix table 1 shows the total number of cooperatives in each of the 14 commodity and functional categories and the number of cooperatives from which data were obtained. All 461 of the cooperatives with annual sales of $15 million or more were selected for inclusion in the study. Of these cooperatives, designated as group 1, usable responses were obtained from 89 percent. Data for nonrespondents were estimated by expanding the averages for other cooperatives in the same principal product or function classification and farm credit district according to sales data obtained from ACS's Statistics and Technical Services Staff.

A sample of the cooperatives with annual sales of less than $15 million was taken according to guidelines recommended by the National Agricultural Statistics Service. Using standard statistical methods, sampling rates were determined for each combination of principal product or function classification and farm credit district.

In some cases, centralized accounting services for affiliated local cooperatives were able to provide detailed financial data. All cooperatives for which these data were available were included in the study. Data were collected on 36 percent of the other 3,870 cooperatives with annual sales of less than $15 million, designated as group 2. Centralized services provided data for a total of 31 local grain and 211 local farm supply cooperatives, designated group 3.

Data for all cooperatives with annual sales of less than $15 million were pooled and expanded by the proportion of observations in each combination of principal product or function classification and farm credit district to derive population estimates. For combinations for which there were an insufficient number of respondents, questionnaires received—but not

Table 1—Number of cooperatives, sales, and total assets, by principal product or function, fiscal 1987

Principal product or function	Cooperatives	Sales	Total assets
	Number	*Million dollars*	
Cotton marketing	20	1,493	568
Cotton ginning	330	874	669
Dairy	244	16,936	3,411
Fruits, vegetables, nuts	274	7,920	3,666
Regional grain	9	6,195	1,673
Local grain	1,538	12,584	4,874
Sugar	20	1,576	848
Livestock, wool, poultry	109	3,286	284
Miscellaneous marketing	67	843	506
Interregional mfg.	6	2,009	1,683
Regional farm supply	11	6,335	2,905
Local farm supply	1,835	8,579	3,663
Service	107	358	225
Large diversified	3	7,339	2,658
All products/functions[1]	4,573	76,327	27,635

[1] Totals may not add due to rounding.

in the sample—were edited and included.

In total, data were collected and analyzed for 2,028 cooperatives, 44 percent of those identified in the population. The cooperatives for which data were collected represented 79.3 percent of total cooperative sales and 79.4 percent of estimated total assets.

GENERAL CHARACTERISTICS AND TRENDS

This section briefly discusses some of the general characteristics of the farmer cooperatives included in this study and examines some of the general trends in the distribution of net margins and financial structure evident since ACS began conducting its financial profile studies in 1954. These topics are discussed in greater detail in following sections of the report.

Cooperatives Included in Study

Table 1 shows the number of cooperatives in each of the 14 principal product or function categories included in the study and each category's total sales and assets. Estimates were made for a total of 4,573 cooperatives, compared with 5,795 in 1976. Sales totaled $76.3 billion[5], compared with $51.8 billion in 1976, and total assets amounted to $27.6 billion, compared with $18.6 billion.

The largest categories were the local farm supply and local grain groups. Combined, these two groups accounted for nearly three quarters of the total number of cooperatives and more than a quarter of all sales and assets. Although the dairy group accounted for only 5 percent of all cooperatives, it led all other groups with 22 percent of total sales.

Figures 2 and 3 show frequency distributions of the cooperatives included in the study according to total sales and assets. Forty-five percent of the cooperatives had sales in the range

[5] Because of differences in the methods used to estimate population statistics, the estimate of total cooperative sales presented here is greater than that for ACS's 1987 farmer cooperative statistics [6, p.12]. Total sales estimated in that study were $74.8 billion although the study included additional small cooperatives.

Figure 2—Frequency Distribution of Cooperatives by Total Sales, Fiscal 1987

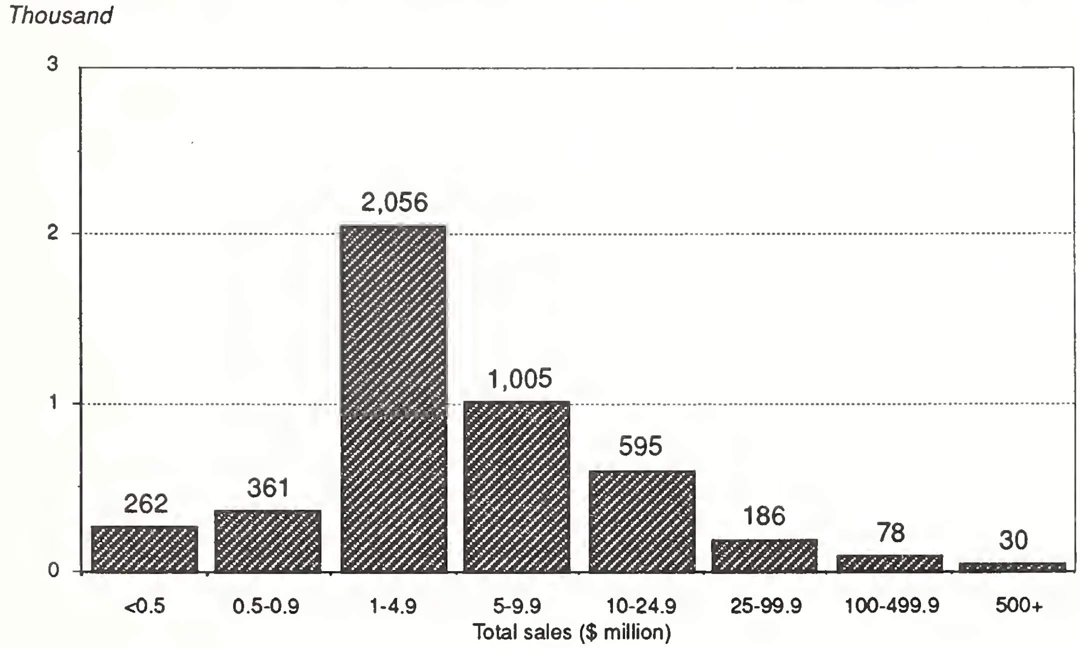
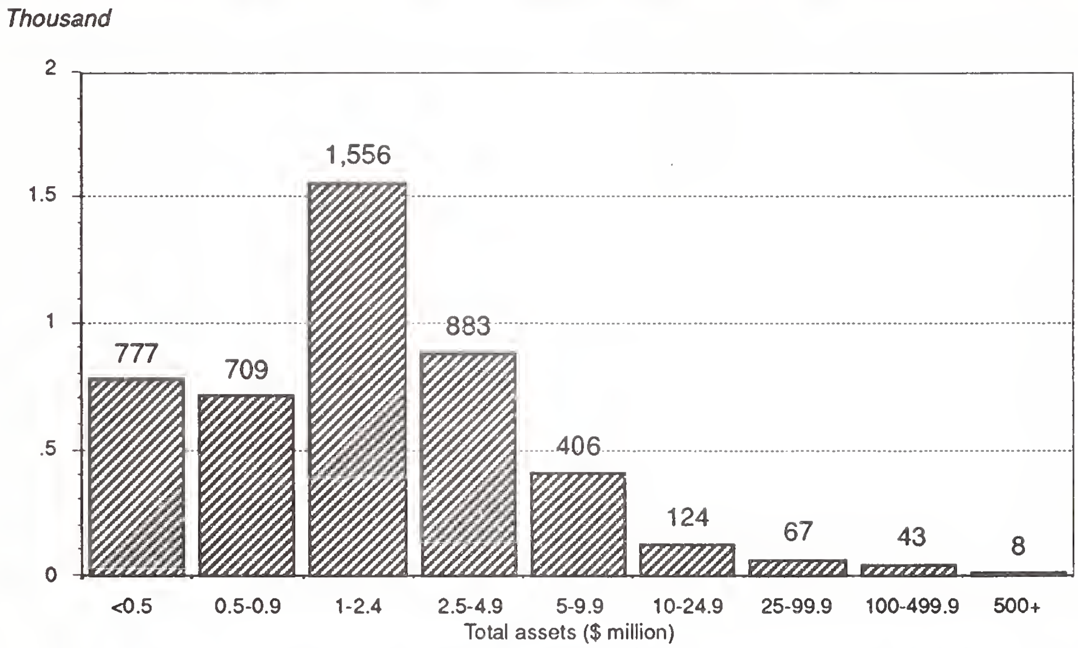


Figure 3—Frequency Distribution of Cooperatives by Total Assets, Fiscal 1987



of $1 million to $4.9 million. Four-fifths of the cooperatives had sales of $1 million to $25 milion. Only 14 percent had sales below $1 million, and 7 percent had sales exceeding $25 million.

Thirty-four percent of the cooperatives had total assets in the range of $1 million to $2.5 million. Eighty-six percent had assets below $5 million. Only 5 percent had more than $10 million. Detailed information on the distribution of cooperatives in each principal product or function category according to total sales, total assets, and farm credit district is presented in appendix tables 2, 3, and 4.

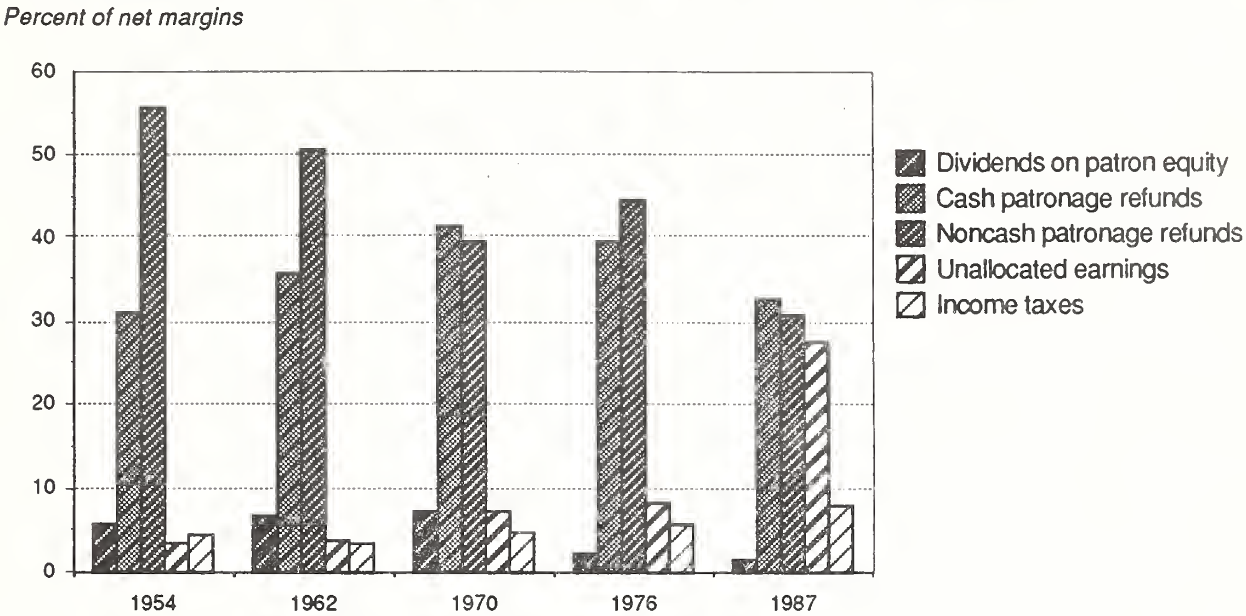
Distribution of Net Margins

In 1987, cooperatives earned $1.6 billion in net margins before deducting net losses, compared with $1.9 billion in 1976. Figure 4 shows that the distribution of net margins has changed considerably since 1954. It indicates recent reductions in the percentage of net margins distributed as dividends on patron equity, as well as declines in the percentage of cash and noncash patronage refunds. However, the most significant observation drawn from figure 4 is the extremely large difference in the percentage of net margins placed in unallocated equity accounts in 1987. In part, as a result of this, the percentage of net margins paid as income taxes also was larger.

The 27.4 percent of net margins assigned to unallocated equity accounts in 1987 was more than three times greater than the proportion assigned to unallocated equity in any other year. Operating losses incurred by cooperatives during the early 1980's often were written off against unallocated equity reserves. More recently, some cooperatives have distributed high proportions of their net margins to unallocated equity reserves in an attempt to rebuild these buffers. However, data on unallocated equity (discussed later in this report) indicate that the increase in the distribution of net margins to unallocated equity more than offset earlier operating losses in a proportionate sense.[6]

[6] See the section of this report on equity capital.

Figure 4—Distribution of Net Margins, by Fiscal Year



Financial Structure

A condensed balance sheet for the cooperatives included in this study is presented in figure 5. This balance sheet represents the average cooperative, and it is important to bear in mind that there is a significant amount of variation in the financial structure of cooperatives among various product and function groups, regions, and size categories. Detailed information on these various groupings can be found in later sections of this report.

Cooperatives, on the average, held 52.7 percent of their assets as current assets and 31.8 percent as fixed assets. Other assets, including investments in other cooperatives, accounted for the remaining 15.5 percent. On the other side of the balance sheet, the average cooperative financed 35.6 percent of its assets with current liabilities and 18 percent with long-term liabilities. The remaining 46.4 percent was financed by equity capital.

As figure 6 shows, the share of assets financed with equity capital increased considerably since 1976. The 1970 and 1976 proportions of assets financed with equity capital represented large drops from the levels of equity capitalization found in 1954 and 1962. The increase between 1976 and 1987 represented, in part, an attempt by many cooperatives to rebuild their balance sheets after losses in the early 1980's. These losses were exacerbated by high interest rates and the high levels of borrowed capital taken on during the 1970's.

The proportion of assets financed by borrowed capital peaked in 1976 at 33.1 percent. The levels of borrowed capital in 1970 and 1976 represented significant increases over the amount of borrowed capital held in 1954 and 1962. The 26.3 percent share of assets financed with borrowed capital in 1987 is closer to those earlier levels. The share of assets financed with other liabilities has increased consistently since 1954. The 27.3 percent figure for 1987 represented a 48 percent increase over 1954.

Significant changes also have occurred in the sources of borrowed capital, as shown in figure 7. BC loans still provide more than half of the capital borrowed by cooperatives. However, their 51.3 percent share in 1987 represented a

Figure 5—Condensed Balance Sheet, Fiscal 1987

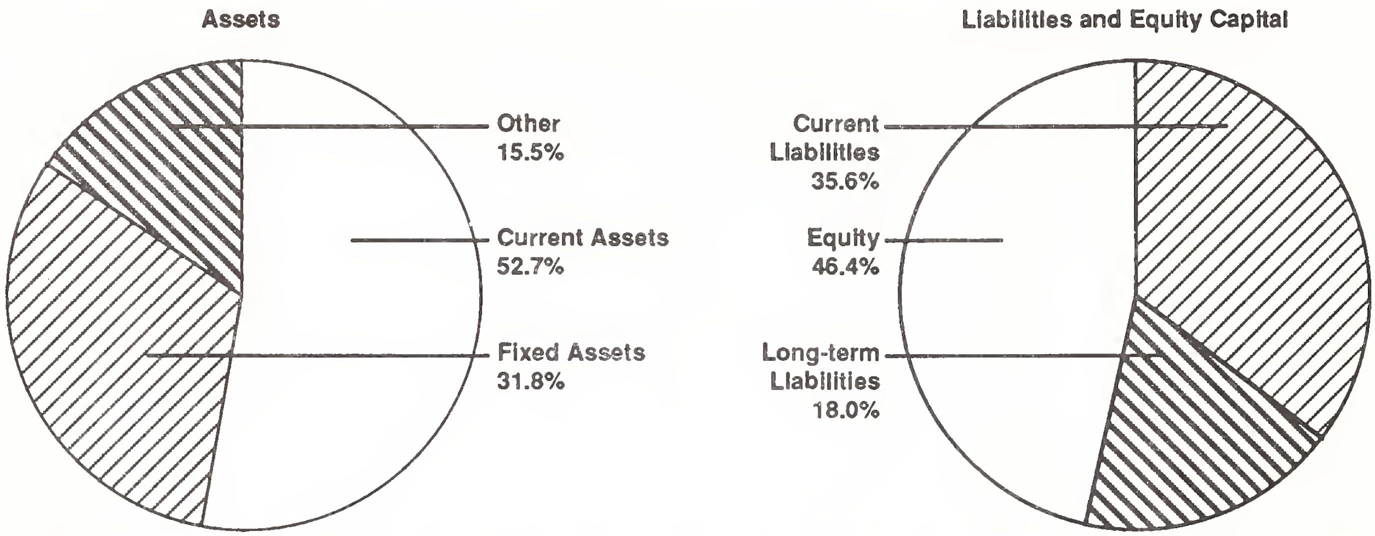


Figure 6—Financial Structure, by Fiscal Year

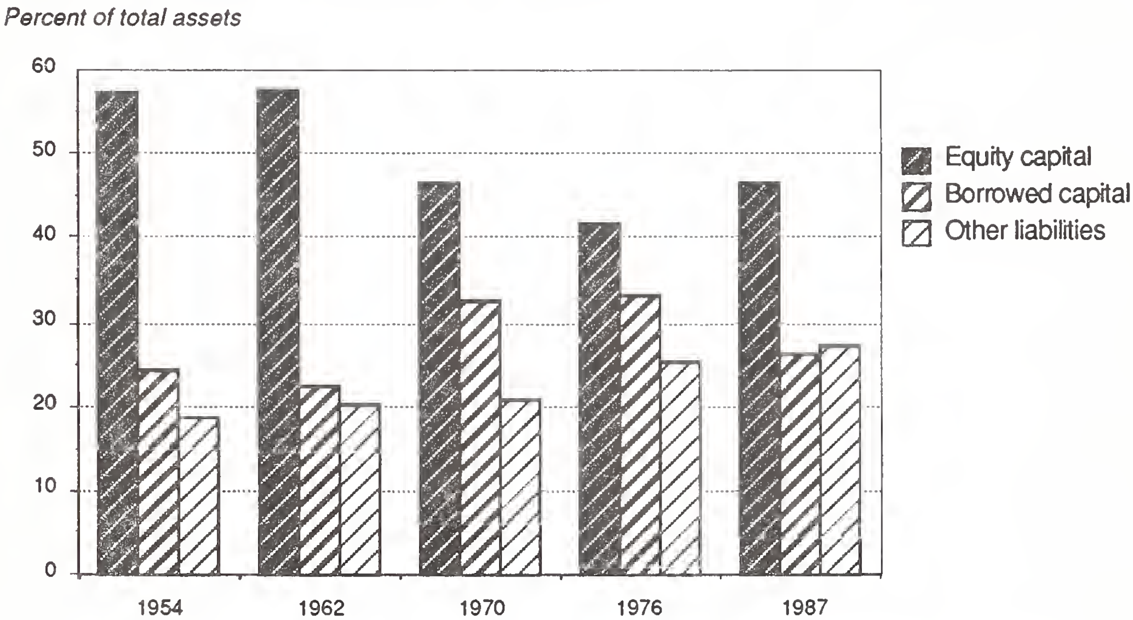
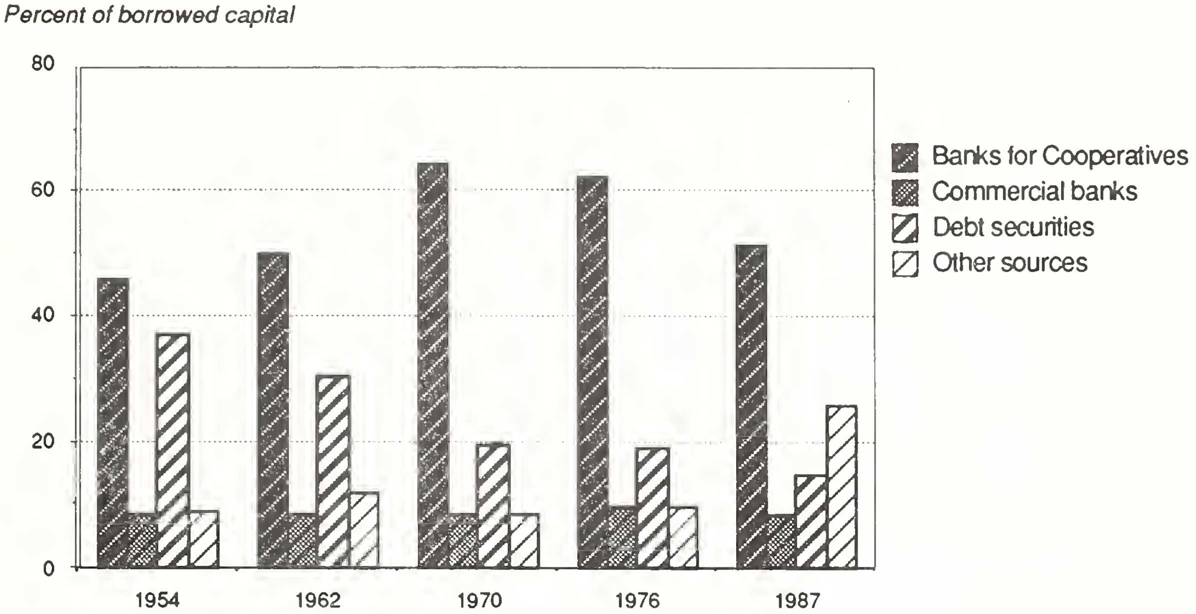


Figure 7—Sources of Borrowed Capital, by Fiscal Year



substantial reduction since 1976. In 1976, 62.2 percent of the capital borrowed by cooperatives was provided by the BCs. The 1987 share still is greater than those in 1954 and 1962.

The share of borrowed capital provided by commercial banks has been fairly stable since 1954. Only 8.2 percent of total borrowed capital came from commercial banks in 1987. The share of borrowed capital supplied by debt securities has gradually declined since 1954. The 14.7 percent supplied by debt securities in 1987 was considerably less than half the share provided in 1954.

The largest increase in share belonged to other sources. After providing a fairly static share since 1954, the proportion of borrowed capital provided by other sources grew from 9.4 percent in 1976 to 25.7 percent in 1987. Because other sources include capitalized leases placed by BCs, the BC loan share represented in figure 7 under-represents total BC involvement in the financing of cooperatives. Also, loans from one cooperative to another may be increasing. Loans by BCs and others to federated cooperatives enable loans to be made to local member cooperatives.

OPERATIONAL SOURCES OF EQUITY CAPITAL

Patrons contribute equity capital to their cooperatives by direct investment through purchase of capital stock or other equity, reinvestment of net margins through retained patronage refunds, and deductions from sales proceeds in the form of per-unit capital retains. In addition, cooperatives acquire equity capital through earnings retained from net margins and not allocated to individual patrons. This section examines operational sources of equity capital by discussing the distribution of net margins and net losses and per-unit capital retain deductions.

Distribution of Net Margins and Losses

Net margins and their distribution are important because, in addition to representing an important source of cooperative equity capital in the form of retained patronage refunds and unallocated earnings, they are a primary source of patron benefits. Net losses and their distribution also are important because they can have

direct impacts on patrons and the financial structure of cooperatives. Although the distribution of net margins and losses of individual cooperatives can vary significantly from year to year according to many factors, including changes in business objectives, operating results, and investment decisions, cautious examination of these distributions can provide useful information about cooperative financial conditions and practices.

Table 2 shows net margins after deducting losses and patronage refunds received from other cooperatives for the 14 principal product or function classifications. Cooperatives had about $1.5 billion in net margins after deducting net losses, compared with $1.8 billion in 1976. Cooperatives earned $1.4 billion of these net margins from their own operations. A total of $62 million in margins were received as patronage refunds from other cooperatives.

Patronage refunds received from other cooperatives included equity write-offs of cooperative investments due to losses. In these cases, the cooperatives incurring the losses wrote them off against allocated equity held by other cooperatives. Two categories, the local grain and the livestock, wool, and poultry groups, received net negative amounts of patronage refunds. The negative patronage refunds received by the local grain cooperatives consisted largely of equity write-offs due to losses incurred by regional cooperatives.

Table 3 shows a breakdown of cooperative operating results between net margins and losses and the distribution of these margins and losses among various distribution methods. Tables 4

Table 2—Net margins and patronage refunds received from cooperatives, by principal product or function, fiscal 1987

Principal product or function	Net margins after deducting net losses[1]	Patronage refunds from other cooperatives[2]	Net margins from own operations[3]
		Thousand dollars	
Cotton marketing	100,532	110	100,422
Cotton ginning	136,025	15,047	120,978
Dairy	188,125	30,747	157,377
Fruits, vegetables, nuts	139,907	664	139,243
Regional grain	51,542	2,056	49,486
Local grain	302,222	(18,652)	320,875
Sugar	5,634	139	5,495
Livestock, wool, poultry	20,074	(387)	20,461
Miscellaneous marketing	11,132	34	11,099
Interregional mfg.	42,893	916	41,977
Regional farm supply	120,156	8,857	111,299
Local farm supply	204,132	15,436	188,696
Service	25,790	2,502	23,288
Large diversified	137,316	4,695	132,621
All products/functions[4]	1,485,480	62,163	1,423,317

[1] Some cooperatives operated on a pooling basis in 1987 and reported no net margins or net losses.
[2] Includes equity writeoffs from other cooperatives.
[3] After deducting net losses.
[4] Totals may not add due to rounding.

Table 3—Distribution of net margins and net losses, by principal product or function, fiscal 1987

Principal product or function	Cooperatives with net margins or net losses[1]	Net margins or net losses	Percentage of net savings or net losses distributed as				
			Dividends on patron equity[2]	Cash patronage refunds[3]	Noncash patronage refund allocations[4]	Additions to unallocated equity[5]	Income taxes[6]
	Number	*Thousand dollars*	*Percent*[7]				
Cotton marketing							
Net margins	18	101,609	0.6	86.5	11.8	0.7	0.4
Net losses	1	(1,077)	0	0	0	100.1	-0.1
Total	19	100,532	0.6	87.4	11.9	-0.4	0.4
Cotton ginning							
Net margins	249	142,464	0.2	78.8	20.8	12.2	-12.1
Net losses	77	(6,439)	-0.8	12.3	45.1	43.5	-0.1
Total	326	136,025	0.3	81.9	19.7	10.8	-12.6
Dairy							
Net margins	189	194,912	0.5	31.8	46.2	16.9	4.6
Net losses	25	(6,787)	0	-6.6	12.1	94.4	0.1
Total	214	188,125	0.5	33.1	47.5	14.1	4.7
Fruits, vegetables, nuts							
Net margins	211	150,784	2.6	31.6	11.0	33.4	21.4
Net losses	31	(10,877)	-0.7	8.8	57.2	35.1	-0.4
Total	242	139,907	2.9	33.3	7.4	33.3	23.1
Regional grain							
Net margins	8	55,537	0.8	6.7	10.8	63.9	17.8
Net losses	1	(3,995)	0	0	0	100.0	0
Total	9	51,542	0.8	7.2	11.7	61.1	19.2
Local grain							
Net margins	1,372	315,864	1.5	18.7	38.2	31.6	9.9
Net losses	154	(13,642)	-0.4	-2.0	21.5	82.1	-1.1
Total	1,526	302,222	1.6	19.6	39.0	29.4	10.4
Sugar							
Net margins	13	6,322	0	11.3	63.2	8.5	17.0
Net losses	3	(688)	0	0	33.7	67.4	-1.2
Total	16	5,634	0	12.7	66.8	1.3	19.2
Livestock, wool, poultry							
Net margins	55	21,099	0.7	45.1	39.7	9.2	5.3
Net losses	23	(1,025)	-0.9	0	4.2	96.7	0
Total	78	20,074	0.8	47.4	41.5	4.8	5.6
Miscellaneous marketing							
Net margins	36	12,361	0.8	42.7	1.4	39.9	15.2
Net losses	18	(1,229)	-0.1	0	2.9	97.3	-0.1
Total	54	11,132	0.9	47.4	1.3	33.5	16.9

(Continued)

Table 3—Distribution of net margins and net losses, by principal product or function, fiscal 1987 (*Continued*)

Principal product or function	Cooperatives with net margins or net losses[1]	Net margins or net losses	Percentage of net savings or net losses distributed as: Dividends on patron equity[2]	Cash patronage refunds[3]	Noncash patronage refund allocations[4]	Additions to unallocated equity[5]	Income taxes[6]
	Number	*Thousand dollars*	*Percent[7]*				
Interregional mfg.							
Net margins	5	69,035	(8)	31.7	14.2	50.9	3.2
Net losses	1	(26,142)	0	0	0	104.7	-4.7
Total	6	42,893	0.1	51.0	22.8	18.1	8.0
Regional farm supply							
Net margins	11	120,156	2.4	13.7	18.3	55.7	9.9
Net losses	0	0	0	0	0	0	0
Total	11	120,156	2.4	13.7	18.3	55.7	9.9
Local farm supply							
Net margins	1,525	218,505	2.4	21.9	41.8	26.4	7.5
Net losses	274	(14,373)	-0.6	-1.7	20.1	83.5	-1.3
Total	1,799	204,132	2.6	23.6	43.3	22.3	8.2
Service							
Net margins	85	26,089	1.0	19.8	43.8	25.2	10.3
Net losses	20	(299)	-0.4	13.4	12.7	75.3	-0.8
Total	105	25,790	1.0	19.9	44.1	24.6	10.4
Large diversified							
Net margins	3	137,316	3.2	23.8	42.8	14.3	15.9
Net losses	0	0	0	0	0	0	0
Total	3	137,316	3.2	23.8	42.8	14.3	15.9
All products/functions							
Net margins	3,780	1,572,054	1.5	32.6	30.6	27.4	7.9
Net losses	628	(86,574)	-0.3	0.9	18.6	82.6	-1.9
Total	4,408	1,485,480	1.6	34.4	31.3	24.1	8.5

[1] Some cooperatives operated on a pooling basis in 1987 and reported no net margins or net losses. Some cooperatives reporting overall net losses had net margins in one or more departments. In some of these cooperatives, patrons of departments with net margins received cash or noncash patronage refund allocations.

[2] Negative values represent outflows due to payment of dividends by cooperatives with net losses. They are included because they increased the amount of shortfall distributed among other items.

[3] For cooperatives with net losses, this item represents charges against patrons' accounts receivable. Patrons were billed, or the charges were deducted from marketing proceeds due patrons.

[4] For cooperatives with net losses, this item represents charges against patron equity accounts.

[5] For cooperatives with net losses, this item represents reductions in unallocated equity.

[6] For cooperatives with net losses, this item represents income tax refunds.

[7] Percents may not add to 100 percent due to rounding.

[8] Less than 0.05 percent.

and 5 show the number of cooperatives that reported using each of the methods of distributing net margins and net losses. A total of 3,780 cooperatives reported net margins in 1987, and 628 reported net losses. Some cooperatives, including those operating on a pooling basis, reported no net margins or losses.

Twenty-two percent of the cooperatives that earned net margins paid dividends on patron equity. However, these dividends accounted for only 1.5 percent of the margins. Patronage refunds were a much more popular and important method of distributing net margins. Seventy percent of the cooperatives with net margins paid cash patronage refunds, and 62 percent made noncash allocations. Total patronage refund distributions amounted to 63.2 percent of net margins. Of these patronage refunds, 51.6 percent were paid in cash.

An even greater number of cooperatives retained net margins as unallocated equity. Eighty-one percent of all cooperatives with net margins made additions to unallocated equity accounts, an amount equal to 27.4 percent of net margins. Sixty-six percent of cooperatives with net margins paid income taxes equal to 7.9 percent of net margins.

Cooperatives with net losses paid an amount equal to 0.3 percent of the $86.6 million in losses to patrons as dividends on patron equity. These dividends are included in table 3 because they contributed to the total shortfall that was distributed among the other items.

The most popular and important method of distributing net losses was to write them off against unallocated equity accounts. Eighty-four percent of the cooperatives with losses wrote losses off against unallocated equity accounts,

Table 4—Method used to distribute net margins, by principal product or function, fiscal 1987

		Cooperatives with net margins distributed as				
Principal product or function	Cooperatives with net margins	Dividends on patron equity	Cash patronage refunds	Noncash patronage refund allocations	Additions to unallocated equity	Income taxes
			Number			
Cotton marketing	18	7	17	16	15	14
Cotton ginning	249	17	197	146	117	80
Dairy	189	35	124	108	122	70
Fruits, vegetables, nuts	211	17	112	65	129	98
Regional grain	8	1	2	2	8	7
Local grain	1,372	304	991	899	1,277	1,060
Sugar	13	0	3	8	6	6
Livestock, wool, poultry	55	10	24	28	40	36
Miscellaneous marketing	36	7	17	7	27	12
Interregional mfg.	5	2	5	5	4	5
Regional farm supply	11	3	9	9	7	7
Local farm supply	1,525	420	1,060	983	1,264	1,031
Service	85	4	65	57	59	47
Large diversified	3	2	3	2	3	3
All products/functions	3,780	829	2,629	2,335	3,078	2,476

Table 5—Method used to distribute net losses, by principal product or function, fiscal 1987

Principal product or function	Cooperatives with net losses	Cooperatives with net losses charged to: Patron accounts receivable	Patron equity accounts	Unallocated equity accounts
		Number		
Cotton marketing	1	0	0	1
Cotton ginning	77	2	20	54
Dairy	25	0	7	17
Fruits, vegetables, nuts	31	3	9	21
Regional grain	1	0	0	1
Local grain	154	0	26	134
Sugar	3	0	1	2
Livestock, wool, poultry	23	0	1	22
Miscellaneous marketing	18	0	1	18
Interregional mfg.	1	0	0	1
Regional farm supply	0	0	0	0
Local farm supply	274	0	57	242
Service	20	1	4	15
Large diversified	0	0	0	0
All products/functions	628	6	126	528

accounting for the distribution of 82.6 percent of all losses. On the other hand, only 19.9 percent of cooperatives with losses charged losses against patron allocated equity accounts, accounting for 18.6 percent of all losses. Only 1 percent of cooperatives with losses charged them against patron accounts, accounting for 0.9 percent of all losses. In these cases, patrons were either billed or the charges were deducted from marketing proceeds due the patrons. Of the cooperatives with losses, 4.3 percent received income tax refunds and 16.7 percent paid income taxes, resulting in net taxes paid equal to 1.9 percent of total losses.

Tables 6 and 7 show the distribution of net margins and net losses by major function. Table 6 indicates substantial differences in the percentage of net margins distributed to unallocated equity accounts in 1976 and 1987 for all three functional groups. Table 7 indicates substantial differences also in the percentage of net losses charged to unallocated equity in 1976 and 1987. In 1976, 53.5 percent of net losses were written off against unallocated equity, compared with 82.6 percent in 1987.

Losses charged against patron equity accounts decreased. In 1976, 29.0 percent of losses were charged against patron equity accounts, compared with 18.6 percent in 1987. More significant was the decrease in the percentage of losses charged against patron accounts. In 1976, 16.7 percent of losses were charged against accounts receivable compared with only 0.9 percent in 1987. On the average, farm supply and marketing/farm supply cooperatives with losses actually paid cash patronage refunds to patrons. This occurred because cooperatives that paid patronage refunds on a depart-

Table 6—Distribution of net margins, by major function, fiscal 1970, 1976, and 1987

Major function and fiscal year	Cooperatives with net margins	Net margins[1]	Percentage of net margins distributed as: Dividends on patron equity	Cash patronage refunds	Noncash patronage refund allocations	Additions to unallocated equity	Income taxes
	Number	*Thousand dollars*	*Percent[1]*				
Marketing							
1970	(2)	174,000	5.9	58.5	30.3	4.2	1.1
1976	1,378	511,358	2.3	60.8	28.5	5.8	2.6
1987	1,320	838,732	1.3	43.5	26.3	21.7	7.2
Farm supply							
1970	(2)	150,000	6.0	40.2	37.2	9.5	7.1
1976	1,895	530,582	1.4	35.9	50.6	7.1	5.0
1987	1,424	274,257	2.4	18.7	38.4	32.2	8.4
Marketing/farm supply							
1970	(2)	182,000	8.7	26.1	50.8	8.1	6.3
1976	1,854	855,732	2.5	28.6	50.2	10.7	8.0
1987	1,036	459,064	1.5	20.9	33.9	34.7	9.0
All functions							
1970	(2)	506,000	7.0	41.4	39.7	7.1	4.8
1976	5,127	1,897,672	2.1	39.3	44.5	8.4	5.7
1987	3,780	1,572,054	1.5	32.6	30.6	27.4	7.9

[1] May not add due to rounding.
[2] Data on the number of cooperatives with net margins were not collected for 1970.

mental basis may have had net margins in one or more departments despite the overall net loss. Although cooperatives in all functional groups, on the average, were able to write part of their 1976 losses off against income taxes, all groups paid income taxes in 1987.

As shown in table 6, 1987 net margins before losses were less than in 1976 for cooperatives as a group and for each of the three functional categories, except for marketing cooperatives. Table 7 shows that, in 1987, cooperatives had higher losses and there were more cooperatives with losses than in 1976. As a result of the decline in operating results and the decrease in the proportion of net margins distributed as dividends on patron equity and cash and noncash patronage refunds, both the cash benefits paid to patrons and the allocated equity invested by patrons were less in 1987 than in 1976. Whereas net operating results declined 19.4 percent from $1.8 billion to $1.5 billion, dividends on equity and cash patronage refunds paid patrons declined 31.1 percent, from $777 million to $536 million, and noncash patronage refund allocations declined 43.9 percent, from $829 million to $465 million. On the other hand, unallocated earnings increased 174.9 percent from $131 million to $359 million.

Per-Unit Capital Retain Deductions

Per-unit capital retains are investments in a cooperative made by a patron, based on the dollar value or physical volume of products marketed through the cooperative and withheld according to a bylaw provision or membership agreement that authorizes the cooperative to make a specified deduction for capital purposes from proceeds due members. These retains should be distinguished from deductions authorized to cover operating expenses. Because per-unit capital retains are based on volume and are independent of net margins, they are a more stable source of equity capital than retained patronage refunds and unallocated earnings.

Table 8 shows the number of cooperatives deducting per-unit capital retains and the amount of per-unit capital retains deducted in 1987 by principal product or function. Cooperatives deducted a total of $194 million in per-unit

Table 7—Distribution of net losses, by major function, fiscal 1970, 1976, and 1987

Major function and fiscal year	Cooperatives with net losses[1]	Net losses[1]	Percentage of net losses distributed as: Dividends on patron equity[2]	Cash patronage refunds[3]	Noncash patronage refund allocations[4]	Additions to unallocated equity[5]	Income taxes[6]
	Number	*Thousand dollars*	*Percent*[7]				
Marketing							
1976	208	42,593	-0.1	21.0	27.2	50.2	1.7
1987	227	38,276	-0.4	3.2	30.1	67.5	-0.4
Farm supply							
1976	256	6,985	-4.0	(8)	29.1	74.6	0.3
1987	275	38,893	-0.2	-0.5	7.1	96.9	-3.4
Marketing/farm supply							
1976	96	4,133	-1.4	0	47.7	52.2	1.5
1987	126	9,404	-0.9	-1.8	19.5	84.9	-1.6
All functions							
1976	560	53,711	-0.7	16.7	29.0	53.5	1.5
1987	628	86,574	-0.3	0.9	18.6	82.6	-1.9

[1] Some cooperatives reporting overall net losses had net margins in one or more departments. In some of these cooperatives, patrons of departments with net margins received cash or noncash patronage refund allocations.
[2] Negative values represent outflows due to payment of dividends by cooperatives with net losses. They are included because they increased the amount of shortfall distributed among other items.
[3] This item represents charges against patrons' accounts receivable.
[4] This item represents charges against patron equity accounts.
[5] This item represents reductions in unallocated equity.
[6] This item represents income tax refunds. Negative values represent tax payments.
[7] May not add due to rounding
[8] Less than 0.05 percent.

Table 8—Per-unit capital retains deducted, by principal product or function, fiscal 1987

Principal product or function	Cooperatives: Total	Deducting per-unit capital retains	Per-unit capital retains deducted
	Number		*Thousand dollars*
Cotton marketing	20	3	8,278
Cotton ginning	330	11	1,141
Dairy	244	42	65,095
Fruits, vegetables, nuts	274	102	74,782
Regional grain	9	4	10,601
Local grain	1,538	65	8,521
Sugar	20	8	17,650
Livestock, wool, poultry	109	3	282
Miscellaneous marketing	67	4	6,466
Interregional mfg.	6	0	0
Regional farm supply	11	0	0
Local farm supply	1,835	5	1,205
Service	107	5	462
Large diversified	3	0	0
All products/functions[1]	4,573	252	194,482

[1] Total may not add due to rounding

capital retains. Fewer than 6 percent of all cooperatives deducted per-unit capital retains. Per-unit capital retains were used primarily by marketing cooperatives.

The largest proportions of cooperatives deducting per-unit capital retains were in the fruits, vegetables, and nuts; regional grain; and sugar categories. More than a third of the cooperatives in these groups deducted per-unit capital retains. Most of the cooperatives in the regional grain category that deducted per-unit capital retains handled rice.

The groups that deducted the greatest dollar amount of per-unit capital retains were the fruits, vegetables, and nuts group and the dairy group. Cooperatives marketing fruits, vegetables, and nuts deducted 38.5 percent of all per-unit capital retains. Those marketing dairy products deducted 33.5 percent of the total. The amounts deducted by regional grain and sugar cooperatives were substantially lower, but they exceeded those deducted by all other groups.

Table 9 shows the differences in per-unit capital retain deductions between 1976 and 1987. Deductions of $194 million in 1987 represented a 50.5 percent increase from the $129 million deducted in 1976. Although fewer marketing cooperatives deducted per-unit capital retains in 1987 than in 1976, the amount of the retains they deducted increased 52 percent. The amount of per-unit capital retains deducted by farm supply and marketing/farm supply cooperatives was substantially less than those deducted by marketing cooperatives.

Table 9—Per-unit capital retains deducted, by major function, fiscal 1976 and 1987

Major function and fiscal year	Cooperatives: Total	Cooperatives: Deducting per-unit capital retains	Per-unit capital retains deducted
	Number	*Number*	*Thousand dollars*
Marketing			
1976	1,674	229	124,502
1987	1,625	190	189,232
Farm supply			
1976	2,164	3	82
1987	1,719	9	1,642
Marketing/farm supply			
1976	1,957	38	4,666
1987	1,229	53	3,607
All functions[1]			
1976	5,795	270	129,250
1987	4,573	252	194,482

[1] Total may not add due to rounding.

FINANCIAL STRUCTURE

Total assets, total equity capital, intercooperative investments, net assets, and net equity capital for all cooperatives are shown in table 10 for financial profile years since 1954. All five values increased between 1976 and 1987. Total assets of cooperatives in 1987 were $27.6 billion, of which $12.8 billion, or 46.4 percent, was equity. This represents an increase in the proportion of total assets financed by equity from 41.7 percent in 1976.

Intercooperative Investment

Intercooperative investments totaled $2.8 billion, or 10.2 percent of total assets, the highest proportion since 1954. Intercooperative investments in 1976 represented 8.6 percent of total assets. The proportion of assets represented by intercooperative investments varied substantially among product groups, but some investment

Table 10—Net assets, net equity capital, and intercooperative investments, fiscal 1954, 1962, 1970, 1976, and 1987

Fiscal year	Total assets	Total equity capital	Intercooperative investments	Net assets	Net equity capital
			Million dollars		
1954	3,351	1,914	278	3,073	1,636
1962	5,323	3,057	498	4,825	2,559
1970	8,477	3,950	796	7,681	3,154
1976	18,554	7,727	1,586	16,968	6,141
1987	27,635	12,818	2,819	24,816	9,999

in other cooperatives existed in all groups. Intercooperative investment occurs across cooperative types. For example, grain marketing and cotton ginning cooperatives often have investments in federated farm supply cooperatives.

Table 11 shows total assets, total equity capital, intercooperative investments, net assets, and net equity capital by principal product or function. Net assets and net equity were obtained by subtracting intercooperative investments from total assets and total equity to eliminate the double counting of assets and equity that occurs when intercooperative investments are included in both the assets of one set of cooperatives and as equity capital of another.

On average, cotton marketing, sugar, and miscellaneous marketing cooperatives held less than 1 percent of total assets in intercooperative investments. On the other hand, cotton ginning, local grain, regional farm supply, local farm supply, service, and large diversified cooperatives held more than 10 percent of their assets as investments in other cooperatives.

Member cooperatives tended to have higher levels of equity capital than the federated cooperatives to which they belonged. Local farm supply cooperatives had equity capital of 67.5 percent of assets, and regional supply cooperatives had equity of 42.0 percent (table 12). Local grain marketing cooperatives had equity of 60.1 percent, as compared to 38.4 percent for the regional grain cooperatives. Cotton ginning cooperatives often are members of cottonseed processing and farm supply cooperatives. Cotton gins had higher equity levels than either cotton marketing cooperatives that include the cottonseed processing cooperatives or farm supply regional cooperatives.

Table 11—Net assets, net equity capital, and intercooperative investments, by principal product or function, fiscal 1987

Principal product or function	Total assets	Total equity capital	Intercooperative investments	Net assets	Net equity capital
			Million dollars		
Cotton marketing	567.8	208.7	2.9	565.0	205.8
Cotton ginning	669.4	460.2	88.4	581.0	371.8
Dairy	3,410.6	1,339.0	259.2	3,151 4	1,079.8
Fruits, vegetables, nuts	3,666.0	1,175.7	39.4	3,626.6	1,136.3
Regional grain	1,673.4	642.9	97.7	1,575.7	545.2
Local grain	4,874.4	2,931.2	650.6	4,223.9	2,280.7
Sugar	848.3	358.3	2.4	845.9	355.8
Livestock, wool, poultry	284.5	142.4	10.1	274.4	132.3
Miscellaneous marketing	506.4	111.3	1.8	504.7	109.6
Interregional mfg.	1,683.5	839.6	40.0	1,643.5	799.6
Regional farm supply	2,905.2	1,219.0	528.5	2,376.7	690.5
Local farm supply	3,662.7	2,472.2	785.2	2,877.5	1,687.1
Service	225.0	166.0	23.3	201.7	142.8
Large diversified	2,658.0	751.0	289.6	2,368.4	461.4
All products/functions[1]	27,635.3	12,817.5	2,819.0	24,816.2	9,998.5

[1] Totals may not add due to rounding.

Condensed Balance Sheets

Table 12 presents condensed balance sheets for 1987 by principal product or function. Table 13 shows condensed balance sheets for 1976 and 1987 by major function. On the average, 52.7 percent of cooperative total assets in 1987 were current assets. Current assets held by marketing cooperatives generally represented a higher proportion of total assets than farm supply cooperatives, in part because of product inventories.

The average marketing cooperative held 57.5 percent of total assets in current form, compared with 48.2 percent for the average farm supply cooperative. Cotton marketing cooperatives and livestock, wool, and poultry cooperatives held over two-thirds of assets in current form. Miscellaneous marketing cooperatives held 85.3 percent current assets. This was probably because these were small associations with few physical assets. Local grain, sugar, interregional manufacturing, regional farm supply, and service cooperatives all held less than half of their assets in current form.

There was not a substantial difference between the average proportion of fixed assets held by marketing and farm supply cooperatives. All three functional categories of cooperatives held about 32 percent of total assets in fixed form. There were substantial differences between specific groups of cooperatives by principal product or function.

The physical operations a cooperative performs determine its requirement for plant, equipment, and other fixed assets. Figure 8 shows the different levels of fixed assets held by types of marketing cooperatives. Sugar beet and sugar cane processing cooperatives use large plants in processing raw products, and sugar cooperatives

Table 12—Condensed balance sheet data, by principal product or function, fiscal 1987

Principal product or function	Total assets	Percentage of total assets represented by: Current assets	Fixed assets	Other assets	Current liabilities	Long-term liabilities	Equity capital
	Million dollars	*Percent*[1]					
Cotton marketing	567.8	68.6	22.3	9.1	55.5	7.7	36.7
Cotton ginning	669.4	52.0	32.5	15.5	23.8	7.5	68.7
Dairy	3,410.6	58.0	29.7	12.3	44.8	15.9	39.3
Fruits, vegetables, nuts	3,666.0	61.6	30.6	7.8	47.2	20.7	32.1
Regional grain	1,673.4	54.9	34.9	10.2	41.8	19.8	38.4
Local grain	4,874.4	44.9	37.9	17.2	29.8	10.0	60.1
Sugar	848.3	47.5	47.4	5.1	36.4	21.3	42.2
Livestock, wool, poultry	284.5	68.3	25.0	6.7	44.3	5.6	50.1
Miscellaneous marketing	506.4	85.3	6.0	8.7	67.6	10.4	22.0
Interregional mfg.	1,683.5	42.2	51.5	6.3	23.0	27.2	49.9
Regional farm supply	2,905.2	44.8	28.6	26.6	30.7	27.4	42.0
Local farm supply	3,662.7	52.5	22.5	25.0	26.2	6.3	67.5
Service	225.0	45.7	38.0	16.3	17.6	8.6	73.8
Large diversified	2,658.0	53.0	28.9	18.2	33.4	38.3	28.3
All products/functions	27,635.3	52.7	31.8	15.5	35.6	18.0	46.4

[1] May not add to 100 percent due to rounding.

Table 13—Condensed balance sheet data, by major function, fiscal 1976 and 1987

Major function and fiscal year	Total assets	Percentage of total assets represented by					
		Current assets	Fixed assets	Other assets	Current liabilities	Long-term liabilities	Equity capital
	Million dollars	*Percent*[1]					
Marketing							
1976	6,482	57.6	33.1	9.3	48.0	17.0	35.0
1987	13,597	57.5	32.0	10.5	42.8	16.0	41.2
Farm supply							
1976	4,234	47.7	33.7	18.6	29.3	20.1	50.6
1987	5,923	48.2	31.1	20.7	25.1	16.1	58.8
Marketing/farm supply							
1976	7,838	54.3	30.7	15.0	37.0	20.7	42.3
1987	8,115	47.9	32.1	20.1	31.1	22.9	46.0
All functions							
1976	18,554	53.9	32.2	13.9	39.0	19.3	41.7
1987	27,635	52.7	31.8	15.5	35.6	18.0	46.4

[1] May not add to 100 percent due to rounding.

had the highest portion of assets held as fixed assets (47.4 percent). Miscellaneous marketing cooperatives did little processing, and they held only 6 percent of their assets in fixed form. Both types of grain cooperatives with their need for grain storage facilities had relatively high levels of fixed assets.

Functions performed and levels of fixed assets varied widely among farm supply cooperatives (figure 9). Interregional manufacturing cooperatives require heavy investment in fertilizer manufacturing, petroleum refining, and other manufacturing processes. This group had the largest percent of assets in fixed assets. Regional and local farm supply cooperatives perform mainly distribution functions for supplies and had a corresponding lower need for fixed assets. The variety of functions performed by supply cooperatives was the principal reason for separating these cooperatives into functional classifications.

Other assets varied considerably among principal product or function and major function, primarily reflecting differences in investments in other cooperatives.

There were few significant changes in the average marketing, farm supply, and marketing/farm supply asset accounts between 1976 and 1987. The largest change was a 6.4-percentage-point drop in the proportion of current assets of marketing/farm supply cooperatives, largely compensated for by a 5.1 percent increase in other assets.

On the other side of the balance sheet, there were significant differences in the proportion of current liabilities between marketing and farm supply cooperatives. On the average, marketing cooperatives had current liabilities equal to 42.8 percent of total assets, compared with farm supply cooperatives with 25.1 percent. This is due in part to substantial amounts of proceeds payable to members in settling accounts or closing pools in marketing cooperatives. These items appear on balance sheets as current liabilities until final payment for the products or settlement of pools. Both cotton and miscellaneous marketing cooperatives had current liabilities of more than half their total assets. On the other hand, cotton ginning, interregional manufacturing, and service cooperatives had current liabilities of less than a fourth.

There was not much difference in the proportion of total assets financed by long-term liabilities among different major functional groupings. Marketing/farm supply cooperatives had the largest proportion of total assets financed by long-term debt, 22.9 percent, compared with the average of 18 percent. However, there was considerable variability among different groups according to principal product or function.

Figure 8—Percentage of Total Assets Held as Fixed Assets by Marketing Cooperatives, Fiscal 1987

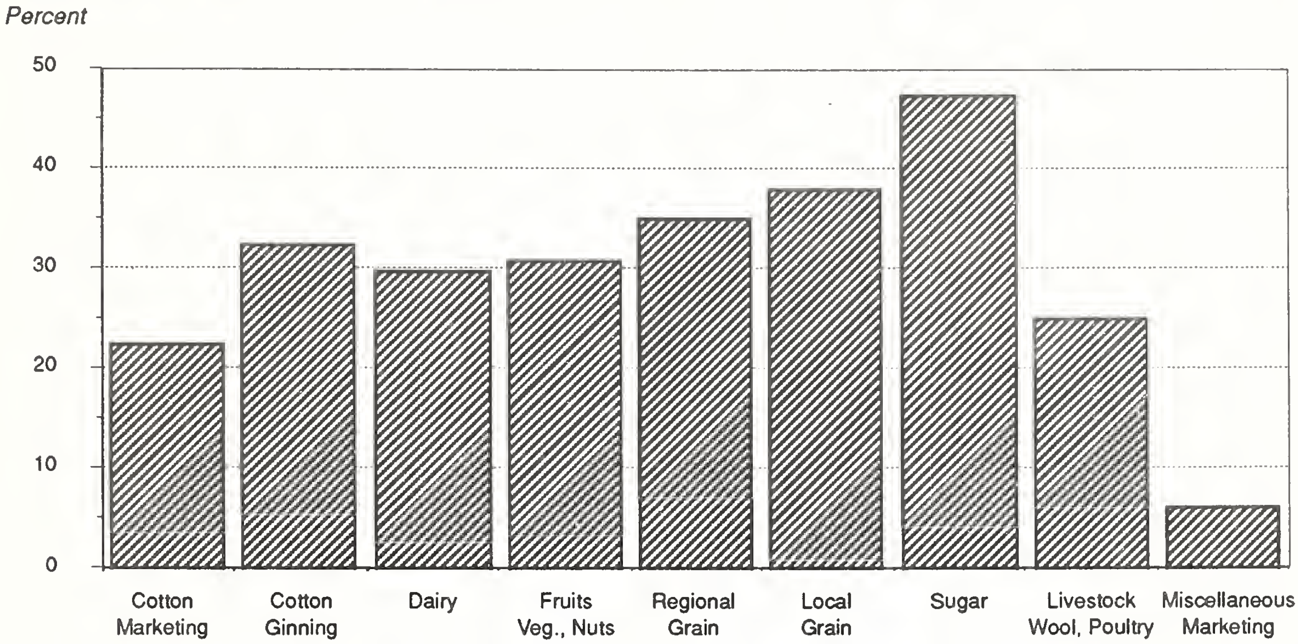
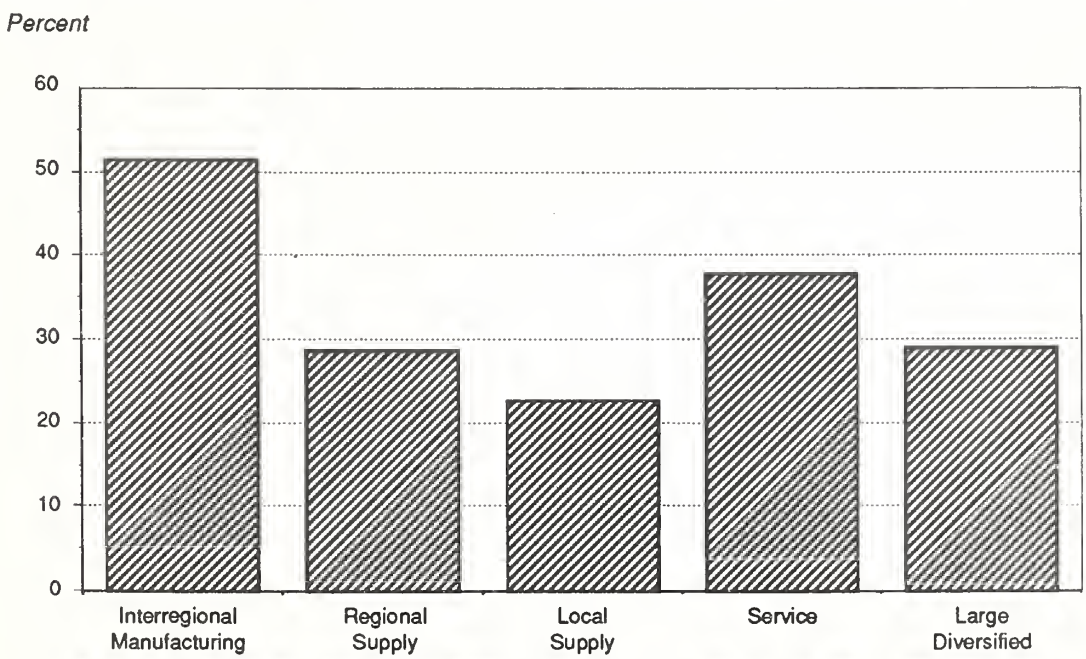


Figure 9—Percentage of Total Assets Held as Fixed Assets by Farm Supply, Service, and Diversified Cooperatives, Fiscal 1987



Interregional manufacturing, regional farm supply, and large diversified cooperatives all financed more than a quarter of their assets with long-term liabilities. On the other hand, cotton marketing; cotton ginning; livestock, wool, and poultry; local farm supply; and service cooperatives financed less than 10 percent of their assets with long-term liabilities.

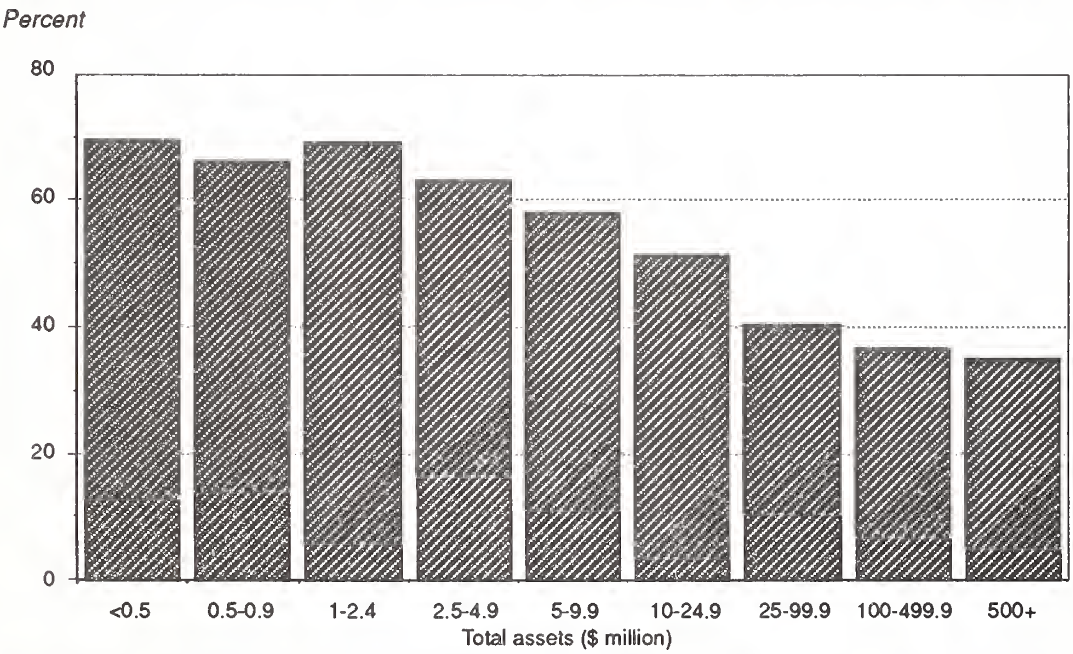
Farm supply cooperatives generally financed a higher proportion of their total assets with equity capital than marketing cooperatives. In 1987, farm supply cooperatives, on the aver-

Table 14—Condensed balance sheet data, by size of cooperative, fiscal 1987

Size (total assets)	Total assets	Percentage of total assets represented by					
		Current assets	Fixed assets	Other assets	Current liabilities	Long-term liabilities	Equity capital
	Million dollars	*Percent*[1]					
Less than $0.5	188.5	57.1	23.2	19.7	23.5	6.9	69.6
$0.5 - 0.9	526.4	53.0	25.1	21.9	26.3	7.5	66.1
$1 - 2.4	2,532.7	49.8	28.8	21.4	25.3	5.9	68.8
$2.5 - 4.9	3,094.3	46.3	31.5	22.3	28.2	8.6	63.2
$5 - 9.9	2,635.1	50.9	32.9	16.2	33.5	8.7	57.8
$10 - 24.9	1,761.7	53.1	34.8	12.0	37.6	11.1	51.3
$25 - 99.9	3,185.0	59.3	31.1	9.6	44.5	14.9	40.6
$100 - 499.9	7,869.8	56.3	31.1	12.6	41.4	21.8	36.8
$500 and over	5,841.7	49.3	34.1	16.6	32.7	32.6	34.7
All sizes	27,635.3	52.7	31.8	15.5	35.6	18.0	46.4

[1] May not add to 100 percent due to rounding.

Figure 10—Percentage of Total Assets Financed by Equity Capital, by Cooperative Size, Fiscal 1987



age, financed 58.8 percent of total assets with equity capital, compared with 41.2 percent for marketing cooperatives. Considerable variation existed among different principal product or function groups. Cotton ginning; local grain; livestock, wool, and poultry; local farm supply; and service cooperatives financed more than half their total assets with equity capital while fruits, vegetables, and nuts; miscellaneous marketing; and large diversified cooperatives financed less than a third of their total assets with equity.

There were some changes in the relative proportions of assets financed by current liabilities, long-term liabilities, and equity capital between 1976 and 1987. The proportion of assets financed by long-term liabilities remained fairly stable. The biggest change was a 4-percentage-point drop in proportion of farm supply assets financed by long-term liabilities. All three functional categories saw drops in the proportion of assets financed by current liabilities and increases in the proportion financed by equity capital.

Table 14 presents the six balance sheet items by size of cooperative. There does not appear to be a simple, discernible relationship between the proportion of assets held as current assets and cooperative size. However, fixed assets generally appear to increase as cooperative size increases although there is a dip for cooperatives between $25 million and $500 million in total assets. Other assets as a proportion of total assets generally decrease as cooperative size increases although there are increases for cooperatives larger than $100 million.

The percentage of total assets financed by equity capital generally decreases as cooperative size increases (figure 10). Cooperatives with less than $500,000 in assets financed an average of 69.6 percent of assets with equity capital. This figure was 34.7 percent for cooperatives with $500 million in assets or more. The proportion of assets financed by current liabilities (figure 11) generally increased with size up to $100 million. However, long-term liabilities (figure 12) showed the greatest proportional increase. Cooperatives with less than $500,000 in total assets financed an average of 6.9 percent of assets with long-term liabilities while cooperatives with more than $500 million in assets financed an average of 32.6 percent with long-term liabilities.

Figure 11—Percentage of Total Assets Financed by Current Liabilities, by Cooperative Size, Fiscal 1987

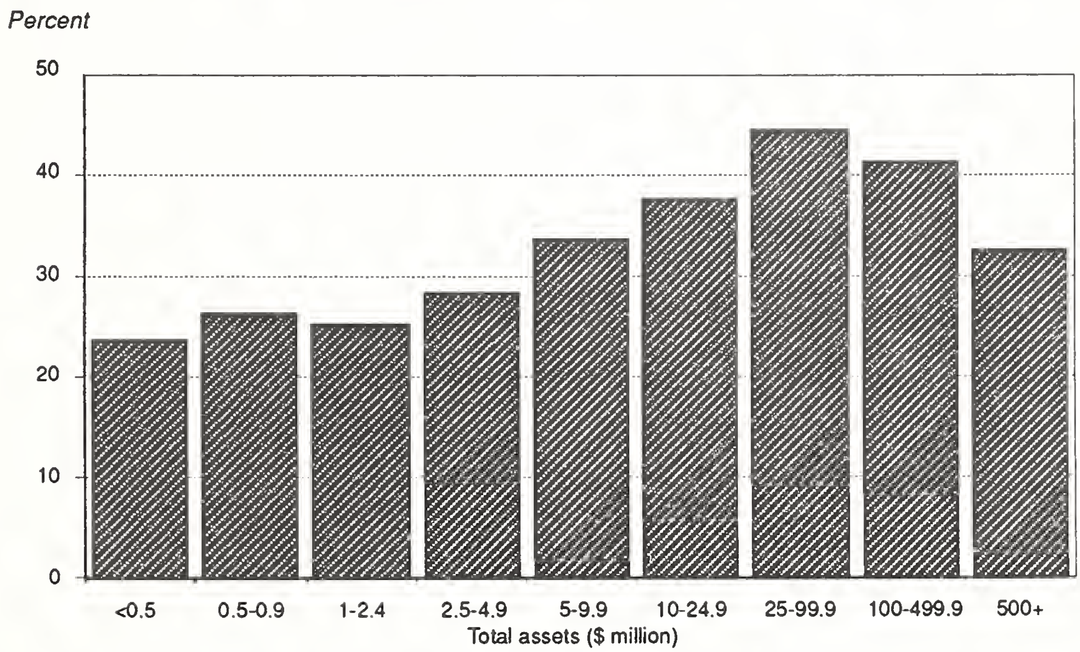


Figure 12—Percentage of Assets Financed by Long-Term Liabilities, by Cooperative Size, Fiscal 1987

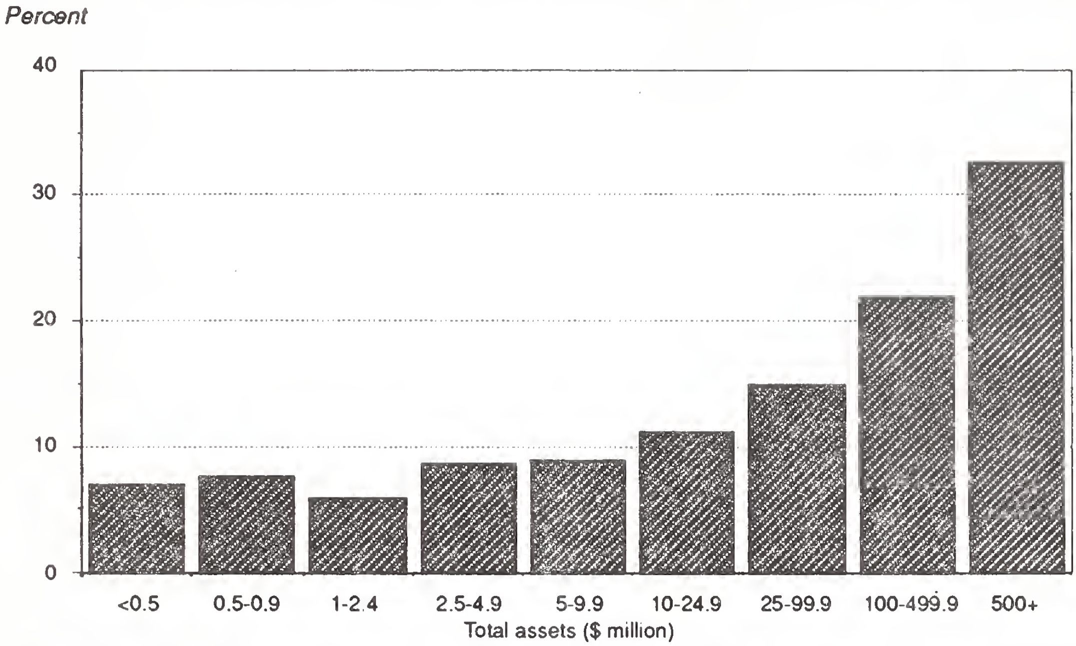


Table 15 shows condensed balance sheets for 1976 and 1987 by farm credit district. The primary purpose in presenting this table is to give individual cooperatives information for comparison with their own operations.

Borrowed Capital and Other Liabilities

Table 16 shows, by principal product or function, the proportion of total assets financed by borrowed capital, other liabilities, and equity capital. Table 17 shows these proportions by major function for 1970, 1976, and 1987. Generally, marketing cooperatives have had higher proportions of borrowed capital and other liabilities than farm supply cooperatives. Farm supply cooperatives generally have financed larger proportions of their assets with equity capital.

Substantial differences in these percentages exist among different commodity groups. Cotton marketing; fruits, vegetables, and nuts; regional grain; regional farm supply; and large diversified cooperatives all financed more than a third of their assets with borrowed capital. These cooperatives also generally financed a large proportion of their assets with other liabilities.

However, dairy cooperatives and miscellaneous marketing cooperatives had the highest proportion of assets financed by other liabilities. The 73-percent value for miscellaneous marketing cooperatives is largely attributable to their having few fixed assets financed with borrowed funds. This group had the lowest proportion of assets (5 percent) financed by borrowed capital.

Table 17 indicates significant drops in the proportion of total assets financed by borrowed capital for all three functional groups between 1976 and 1987. This corresponded to general increases in the percentages of assets financed by other liabilities and equity capital. Only farm supply cooperatives showed a drop in the percentage of assets financed by other liabilities. All cooperative groups showed substantial increases in the proportion of total assets financed by equity capital.

Table 18 shows, by cooperative size, the proportion of total assets financed by borrowed capital, other liabilities, and equity capital. All three components appear to be related to size.

Table 15—Condensed balance sheet data, by farm credit district, fiscal 1976 and 1987

Farm credit district and fiscal year	Total assets[1]	Percentage of total assets represented by: Current assets	Fixed assets	Other assets	Current liabilities	Long-term liabilities	Equity capital
	Million dollars	*Percent*[1]					
Springfield							
1976	1,139	65.4	27.1	7.5	41.9	30.3	27.8
1987	2,793	48.9	38.4	12.7	31.0	40.3	28.7
Baltimore							
1976	500	56.5	28.9	14.6	32.5	20.4	47.1
1987	817	57.9	24.1	18.0	37.1	15.8	47.1
Columbia							
1976	1,139	57.2	30.8	12.0	43.2	19.7	37.1
1987	1,344	64.6	24.1	11.3	44.9	17.4	37.7
Louisville							
1976	1,371	59.8	25.5	14.7	42.5	13.3	44.2
1987	2,127	57.0	24.9	18.1	45.5	12.8	41.7
Jackson							
1976	841	45.9	41.5	12.6	33.1	25.9	41.0
1987	881	51.3	32.5	16.2	28.3	15.7	56.0
St. Louis							
1976	3,586	45.1	41.3	13.6	32.0	32.1	35.9
1987	4,373	46.1	36.1	17.8	28.2	20.9	50.9
St. Paul							
1976	3,300	54.8	28.2	17.0	40.0	12.1	47.9
1987	4,942	50.4	30.2	19.4	33.9	14.9	51.2
Omaha							
1976	1,712	51.0	30.5	18.5	33.5	12.6	53.9
1987	2,301	45.3	35.4	19.2	26.9	10.6	62.5
Wichita							
1976	1,266	54.4	30.7	14.9	39.5	10.0	50.5
1987	1,874	49.6	33.5	16.9	30.7	14.1	55.2
Texas							
1976	877	45.8	37.5	16.7	35.9	20.8	43.3
1987	1,501	55.9	32.5	11.6	32.2	16.6	51.2
Sacramento							
1976	1,993	63.3	29.5	7.2	52.5	14.7	32.8
1987	3,270	65.3	28.5	6.2	51.5	15.3	33.1
Spokane							
1976	830	57.1	29.0	13.9	42.9	16.2	40.9
1987	1,411	51.9	31.6	16.4	40.2	12.7	47.1
All districts							
1976	18,554	53.9	32.2	13.9	39.0	19.3	41.7
1987	27,635	52.7	31.8	15.5	35.6	18.0	46.4

[1] May not add due to rounding.

The proportion of assets financed by borrowed capital generally increases as cooperative size increases (see figure 13). Cooperatives with less than $500,000 total assets financed 12.3 percent of assets with borrowed capital, while cooperatives with more than $500 million in assets financed 40.2 percent.

The proportion of assets financed with

Table 16—Financial structure, by principal product or function, fiscal 1987

Principal product or function	Total assets	Percentage of total assets represented by		
		Borrowed capital	Other liabilities	Equity capital
	Million dollars	*Percent*[1]		
Cotton marketing	567.8	35.1	28.1	36.7
Cotton ginning	669.4	11.5	19.8	68.7
Dairy	3,410.6	20.7	40.0	39.3
Fruits, vegetables, nuts	3,666.0	39.7	28.2	32.1
Regional grain	1,673.4	36.8	24.8	38.4
Local grain	4,874.4	16.1	23.7	60.1
Sugar	848.3	25.9	31.9	42.2
Livestock, wool, poultry	284.5	20.8	29.2	50.1
Miscellaneous marketing	506.4	5.0	73.0	22.0
Interregional mfg.	1,683.5	28.5	21.6	49.9
Regional farm supply	2,905.2	34.8	23.2	42.0
Local farm supply	3,662.7	14.4	18.1	67.5
Service	225.0	12.6	13.6	73.8
Large diversified	2,658.0	40.6	31.1	28.3
All products/functions	27,635.3	26.3	27.3	46.4

[1] May not add to 100 percent due to rounding.

Table 17—Financial structure, by major function, fiscal 1970, 1976, and 1987

Major function and fiscal year	Total assets	Percentage of total assets represented by		
		Borrowed capital	Other liabilities	Equity capital
	Million dollars	*Percent*[1]		
Marketing				
1970	3,138	31.4	25.6	43.0
1976	6,482	35.5	29.5	35.0
1987	13,597	27.1	31.8	41.2
Farm supply				
1970	1,668	27.0	16.6	56.4
1976	4,234	28.3	21.1	50.6
1987	5,923	21.6	19.6	58.8
Marketing/farm supply				
1970	3,671	36.3	18.5	45.2
1976	7,838	33.8	23.9	42.3
1987	8,115	28.5	25.4	46.0
All functions				
1970	8,477	32.6	20.8	46.6
1976	18,554	33.1	25.2	41.7
1987	27,635	26.3	27.3	46.4

[1] May not add to 100 percent due to rounding.

other liabilities also generally increased as size increased, although there was a small drop by the largest size. Cooperatives with less than $500,000 in total assets financed 18.1 percent of their assets with other liabilities, while cooperatives with assets in the $100 million to $499.9 million range financed 32.5 percent of assets with other liabilities. Cooperatives with assets of more than $500 million financed 25.1 percent of assets with other liabilities.

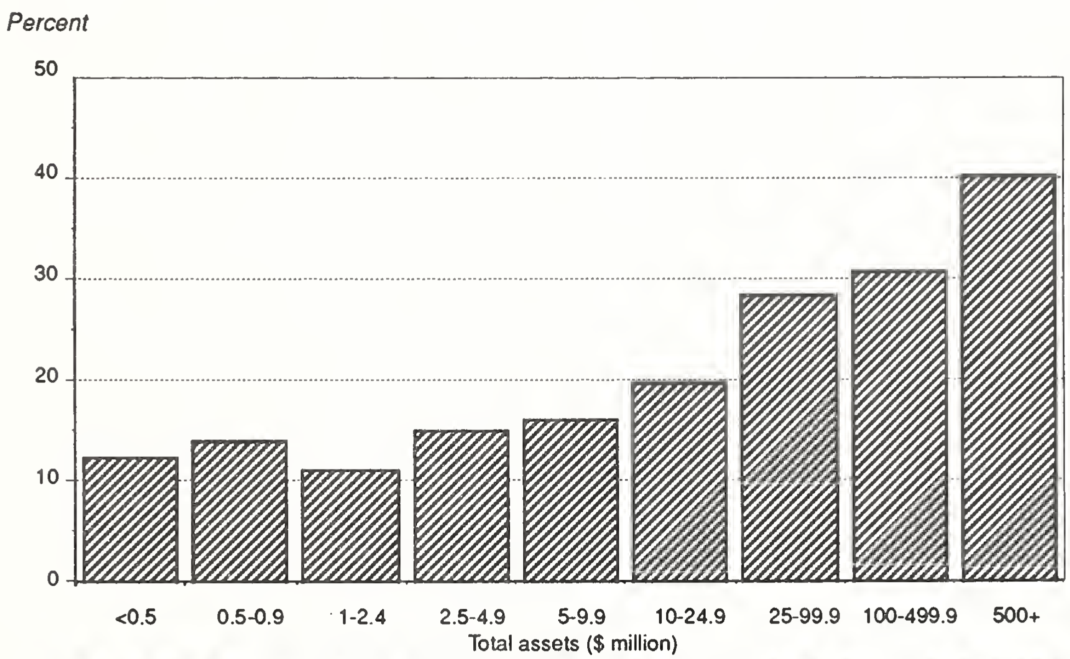
Table 19 shows, by farm credit district, the percentage of total assets financed by borrowed capital, other liabilities, and equity capital. The primary purpose in presenting this table is to

Table 18—Financial structure, by size of cooperative, fiscal 1987

Size (total assets)	Total assets	Percentage of total assets represented by		
		Borrowed capital	Other liabilities	Equity capital
	Million dollars	*Percent*[1]		
Less than $0.5	188.5	12.3	18.1	69.6
$0.5 - 0.9	526.4	13.8	20.1	66.1
$1 - 2.4	2,532.7	11.0	20.2	68.8
$2.5 - 4.9	3,094.3	14.8	22.0	63.2
$5 - 9.9	2,635.1	16.0	26.2	57.8
$10 - 24.9	1,761.7	19.8	28.9	51.3
$25 - 99.9	3,185.0	28.4	31.0	40.6
$100 - 499.9	7,869.8	30.7	32.5	36.8
$500 and over	5,841.7	40.2	25.1	34.7
All sizes	27,635.3	26.3	27.3	46.4

[1] May not add to 100 percent due to rounding.

Figure 13—Percentage of Total Assets Financed by Borrowed Capital, by Cooperative Size, Fiscal 1987



give individual cooperatives information for comparison with their own operations.

Equity Capital

Individual patrons acquire allocated equity in cooperatives by (1) purchasing capital stock, membership certificates, or other equity accounts, (2) reinvesting net margins through retained patronage refunds, which may be evidenced by capital stock, equity certificates, or book credits, or (3) agreeing to per-unit capital retain deductions, which also may be evidenced by various certificates or credits. Unallocated equity is retained from net margins by cooperatives and is not allocated to individual patrons.

Table 19—Financial structure, by farm credit district, fiscal 1970, 1976, and 1987

Farm credit district and fiscal year		Total assets[1]	Percentage of total assets represented by		
			Borrowed capital	Other liabilities	Equity capital
		Million dollars	Percent[1]		
Springfield	1970	650	43.7	22.3	34.0
	1976	1,139	37.4	34.8	27.8
	1987	2,793	40.8	30.5	28.7
Baltimore	1970	315	31.7	18.5	49.8
	1976	500	29.5	23.4	47.1
	1987	817	23.3	29.6	47.1
Columbia	1970	494	35.0	20.3	44.7
	1976	1,139	38.4	24.5	37.1
	1987	1,344	28.2	34.2	37.7
Louisville	1970	660	36.5	19.4	44.1
	1976	1,371	30.2	25.6	44.2
	1987	2,127	18.3	40.1	41.7
Jackson	1970	340	37.9	15.3	46.8
	1976	841	34.7	24.3	41.0
	1987	881	25.1	18.9	56.0
St. Louis	1970	1,186	36.3	20.9	42.8
	1976	3,586	41.8	22.3	35.9
	1987	4,373	25.6	23.4	50.9
St. Paul	1970	1,588	23.1	21.4	55.5
	1976	3,300	25.2	26.9	47.9
	1987	4,942	21.3	27.5	51.2
Omaha	1970	745	27.8	19.4	52.8
	1976	1,712	23.2	22.9	53.9
	1987	2,301	15.1	22.4	62.5
Wichita	1970	575	30.6	17.1	52.3
	1976	1,266	28.9	20.6	50.5
	1987	1,874	27.2	17.6	55.2
Texas	1970	460	27.8	22.6	49.6
	1976	877	35.6	21.1	43.3
	1987	1,501	24.8	24.0	51.2
Sacramento	1970	990	34.0	24.8	41.2
	1976	1,993	39.3	27.9	32.8
	1987	3,270	36.9	30.0	33.1
Spokane	1970	474	40.7	21.1	38.2
	1976	830	29.4	29.7	40.9
	1987	1,411	24.4	28.5	47.1
All districts	1970	8,477	32.6	20.8	46.6
	1976	18,554	33.1	25.2	41.7
	1987	27,635	26.3	27.3	46.4

[1] May not add due to rounding.

Unallocated equity is frequently based on member business, although it is usually derived from nonmember or nonpatronage business. Some level of reserves may be required by State law. However, unallocated equity often is accumulated at a cooperative's discretion as a buffer against future operating losses and the need to charge these losses against the allocated equity accounts of patrons.

Table 20 shows the percentage of total equity represented by allocated and unallocated equity by principal product or function. A fifth of all cooperative equity was held in unallocated form. The large diversified, miscellaneous marketing, and service cooperatives all held more than a third of their equity in unallocated form. Cotton marketing, cotton ginning, and regional grain cooperatives held the smallest proportions of equity in unallocated form—less than one-tenth of total equity.

Figure 14 shows that the proportion of total equity held in unallocated form has steadily grown since 1954. Table 21 indicates that this proportion has grown for all three major functional classifications since 1970. This growth has been most pronounced among marketing cooperatives. In 1970 and 1976, only about 6 percent of total equity was held in unallocated form by marketing cooperatives, compared with 16.8 percent in 1987.

On the average, only 13 percent of total equity was in unallocated form in 1970, compared with 21 percent in 1987. There was more than a 5-percentage-point increase between 1976 and 1987. Operating losses incurred by cooperatives during the early 1980's often were written off against unallocated equity reserves. More recently, some cooperatives distributed high proportions of net margins to unallocated equity reserves in an attempt to rebuild these buffers.

Table 20—Allocated and unallocated equity capital, by principal product or function, fiscal 1987

Principal product or function	Total equity capital	Percentage of total equity represented by: Allocated equity	Unallocated equity
	Million dollars	*Percent*[1]	
Cotton marketing	208.7	92.2	7.8
Cotton ginning	460.2	90.3	9.7
Dairy	1,339.0	86.0	14.0
Fruits, vegetables, nuts	1,175.7	85.4	14.6
Regional grain	642.9	91.4	8.6
Local grain	2,931.2	74.6	25.4
Sugar	358.3	86.5	13.5
Livestock, wool, poultry	142.4	75.8	24.2
Miscellaneous marketing	111.3	56.0	44.0
Interregional mfg.	839.6	83.0	17.0
Regional farm supply	1,219.0	84.7	15.3
Local farm supply	2,472.2	75.1	24.9
Service	166.0	63.4	36.6
Large diversified	751.0	60.8	39.2
All products/functions	12,817.5	79.3	20.7

[1] May not add to 100 percent due to rounding.

Figure 14—Percentage of Equity Capital Held in Unallocated Form, by Fiscal Year

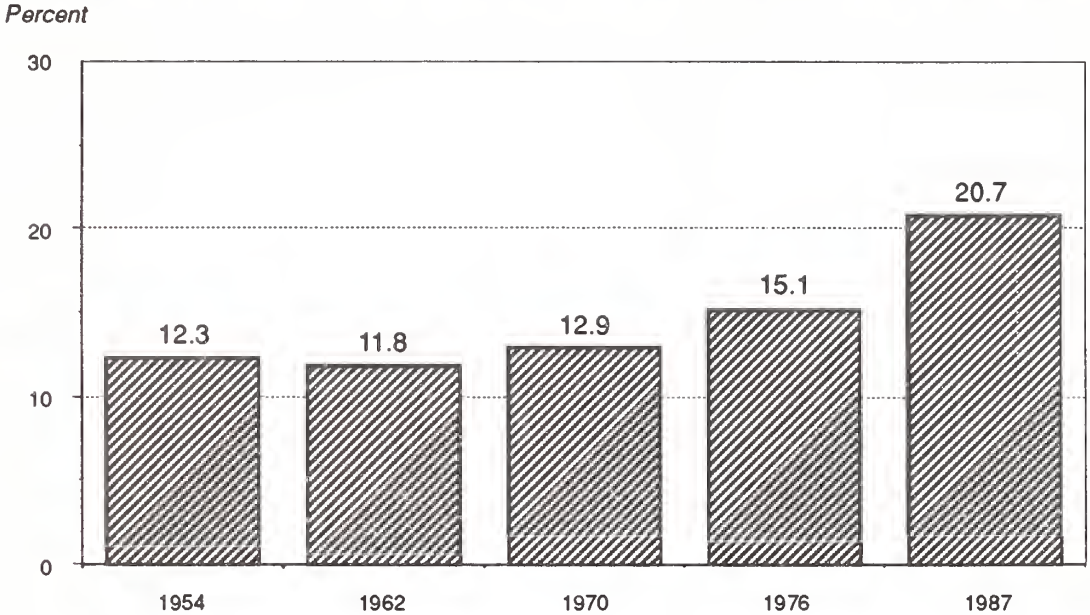


Table 21—Allocated and unallocated equity capital, by major function, fiscal 1970, 1976, and 1987

Major function and fiscal year	Total equity capital	Percentage of total equity represented by: Allocated equity	Percentage of total equity represented by: Unallocated equity
	Million dollars	*Percent*	
Marketing			
1970	1,350	94.5	5.5
1976	2,268	94.1	5.9
1987	5,596	83.2	16.8
Farm supply			
1970	941	84.5	15.5
1976	2,143	82.3	17.7
1987	3,485	77.9	22.1
Marketing/farm supply			
1970	1,659	82.7	17.3
1976	3,316	80.3	19.7
1987	3,737	74.8	25.2
All functions			
1970	3,950	87.1	12.9
1976	7,727	84.9	15.1
1987	12,818	79.3	20.7

However, the data in table 21 indicate that the increases in unallocated equity more than offset earlier operating losses in a proportionate sense.

Table 22 shows the relationship between the proportion of equity held in unallocated form and cooperative size. No clear relationship exists

Table 22—Allocated and unallocated equity capital, by size of cooperative, fiscal 1987

Size (total assets)	Total equity capital[1]	Percentage of total equity represented by	
		Allocated equity	Unallocated equity
Million dollars		Percent	
Less than $0.5	131.2	72.0	28.0
$0.5 - 0.9	348.1	78.0	22.0
$1 - 2.4	1,742.2	74.2	25.8
$2.5 - 4.9	1,955.1	75.4	24.6
$5 - 9.9	1,523.0	77.8	22.2
$10 - 24.9	903.9	79.7	20.3
$25 - 99.9	1,291.7	89.8	10.2
$100 - 499.9	2,895.0	81.1	18.9
$500 and over	2,027.4	79.9	20.1
All sizes	12,817.5	79.3	20.7

[1] Total may not add due to rounding.

although smaller cooperatives generally hold a higher proportion of their equity in unallocated form. This is consistent with earlier data on the 100 largest farmer cooperatives [4, pp. 38 and 126]. However, some of the difference between small and large cooperatives probably is due to losses written off against unallocated reserves by some large regional and interregional cooperatives during the early 1980's. This is consistent with information in table 20, which indicates lower proportions of unallocated equity held by regional grain, interregional manufacturing, and regional farm supply cooperatives, groups that experienced substantial losses during that period.

Sources of Borrowed Capital

Table 23 shows the proportion of borrowed capital from each of several sources. Table 24 gives the number of cooperatives with borrowed capital from each of the sources. Sixty-nine percent of all cooperatives had borrowed capital at the end of their 1987 fiscal year. All cotton marketing, regional grain, interregional manufacturing, regional farm supply, and large diversified cooperatives had borrowed capital. Other groups with high proportions of borrowers included sugar, cotton ginning, and local grain cooperatives. More than three-fourths of these cooperatives had borrowed capital. The livestock, wool, and poultry group had the lowest proportion of cooperatives with borrowed capital; fewer than one-third of the cooperatives in this group held borrowed capital.

More cooperatives borrowed capital from BCs than from any other source. Sixty-seven percent of the cooperatives with borrowed capital, or 46 percent of all cooperatives, had loans from BCs. Less than a third of cooperative borrowers acquired financing from commercial banks, bonds and notes, or other sources.

All regional grain, interregional manufacturing, and regional farm supply cooperatives held borrowed capital from BCs. On the other hand, only one of the three large diversified cooperatives was a BC borrower. All three of these cooperatives had loans from commercial banks, as did more than one-half of other marketing cooperatives with borrowed funds. The group with the lowest proportion of cooperative borrowers served by commercial banks was the interregional manufacturing group. Only one of these six cooperatives had borrowed capital from commercial banks.

Table 23—Sources of borrowed capital, by principal product or function, fiscal 1987

Principal product or function	Total borrowed capital	Percentage of total borrowed capital from			
		Banks for Cooperatives	Commercial banks	Bonds and notes issued by cooperatives	Other sources
	Million dollars	*Percent*[1]			
Cotton marketing	199.5	45.2	6.8	4.0	44.0
Cotton ginning	76.7	54.1	23.3	3.3	19.4
Dairy	707.0	62.0	12.1	5.5	20.4
Fruits, vegetables, nuts	1,456.5	65.4	6.4	11.8	16.4
Regional grain	616.2	67.9	9.9	4.8	17.4
Local grain	786.4	61.7	7.8	14.0	16.5
Sugar	219.3	68.1	16.2	0	15.7
Livestock, wool, poultry	59.0	58.5	30.1	1.0	10.4
Miscellaneous marketing	25.2	64.1	21.9	9.8	4.2
Interregional mfg.	480.1	31.5	0.7	0.1	67.7
Regional farm supply	1,011.9	43.5	1.3	34.3	20.9
Local farm supply	525.7	67.9	8.4	9.0	14.6
Service	28.5	25.5	58.2	10.1	6.2
Large diversified	1,079.5	13.9	12.1	28.4	45.5
All products/functions	7,271.3	51.3	8.2	14.7	25.7

[1] May not add to 100 percent due to rounding.

Table 24—Number of cooperatives with borrowed capital from each source, by principal product or function, fiscal 1987

Principal product or function	Cooperatives		Cooperatives with borrowed capital from			
	Total	With borrowed capital	Banks for Cooperatives	Commercial banks	Bonds and notes issued by cooperatives	Other sources
	Number					
Cotton marketing	20	20	19	3	2	3
Cotton ginning	330	249	146	78	18	43
Dairy	244	103	41	46	17	44
Fruits, vegetables, nuts	274	162	100	50	17	63
Regional grain	9	9	9	3	7	8
Local grain	1,538	1,185	876	194	449	341
Sugar	20	17	15	4	0	11
Livestock, wool, poultry	109	34	15	11	2	15
Miscellaneous marketing	67	31	16	16	6	7
Interregional mfg.	6	6	6	1	1	5
Regional farm supply	11	11	11	2	9	10
Local farm supply	1,835	1,284	841	228	383	429
Service	107	46	25	16	2	8
Large diversified	3	3	1	3	3	3
All products/functions	4,573	3,160	2,121	655	916	990

Twenty-nine percent of cooperative borrowers had bonds or notes outstanding at the end of their fiscal year. More than two-thirds of the regional grain cooperatives and three-fourths of the regional farm supply cooperatives holding borrowed capital had bonds or notes outstanding. Some issues of bonds and notes were held only by cooperative members. However, other issues, especially those of large cooperatives, were available to a wider group.

Thirty-one percent of cooperative borrowers used capital from other sources. Other sources of borrowed capital include leases, industrial development bonds, loans from other cooperatives, insurance companies, and marketing and supply companies. Although the survey questionnaire used in this study did not ask for specification of other sources of borrowed capital, examination of the 100 largest farmer cooperatives, which accounted for 59 percent of total assets in 1987, indicated that leases accounted for 6.9 percent of their borrowed capital, industrial development bonds for 6.4 percent, other nonfinancial organizations (both cooperatives and other businesses) 5.1 percent, Commodity Credit Corporation and other government sources 2 percent, commercial paper 0.1 percent, and other sources 2 percent [7, p. 9].

Fifty-one percent of the capital borrowed by cooperatives at the end of their 1987 fiscal year was supplied by BCs. In contrast, commercial banks provided only 8 percent. Both bonds and notes issued by cooperatives and other sources were more important.

BCs provided a majority of the capital borrowed by cooperatives in most of the principal product or function groups. However, BCs provided only 14 percent of the capital borrowed by the large diversified cooperatives, the smallest proportion of any group. For the interregional manufacturing cooperatives, the BCs' share of borrowed funds was one of the lowest, 32 percent. Large diversified and interregional manufacturing groups included the largest cooperatives. Firms of this size and their lenders must consider lenders' loan limits and the amount of loan concentration in a single firm or with a single lender. Regional grain cooperatives were the only group of regional cooperatives for which the BCs provided more than half the borrowed capital.

Although commercial banks provided less than a tenth of the capital borrowed by cooperatives, there was substantial variance among groups. Interregional manufacturing and regional farm supply cooperatives financed a small fraction of their borrowing needs through commercial banks. On the other hand, service cooperatives obtained more than half of the capital they borrowed from commercial banks.

There also was some variance in the proportion of borrowed funds financed through bonds and notes. Although regional farm supply and large diversified cooperatives acquired a considerable proportion of their borrowed capital through bonds and notes, interregional manufacturing cooperatives financed only 0.1 percent of their borrowed capital through these instruments. Sugar cooperatives did not use this source.

One-quarter of all cooperatives' borrowed capital came from other sources. Interregional manufacturing, large diversified, and cotton marketing cooperatives used these sources proportionately more than other cooperatives. The share of borrowed capital these cooperatives financed through other sources ranged from 44 to 68 percent.

There was considerable variation in the way regional cooperatives borrowed capital. Interregional manufacturing, regional farm supply, and large diversified cooperatives used the BCs proportionately less than other cooperatives. However, regional grain cooperatives used the BCs proportionately more than any other group. Regional grain cooperatives were financed similarly to other grain cooperatives, except that the smaller cooperatives made proportionately more use of bonds and notes in place of some BC borrowing. Local farm supply cooperatives relied relatively more heavily on BC and commercial bank loans when compared with regional farm supply cooperatives, which used bonds and notes and other sources to a greater extent.

Table 25 shows the proportion of borrowed capital for each of several sources by major function for fiscal years ending in 1970, 1976, and 1987. The proportion of total borrowed capital provided by BCs declined to 51 percent in 1987 from 64 percent in 1970. As figure 15 shows, the proportion of borrowed capital provided by BCs in 1987 was slightly higher than in 1962. The

Figure 15—Percentage of Borrowed Capital Provided by Banks for Cooperatives, by Fiscal Year

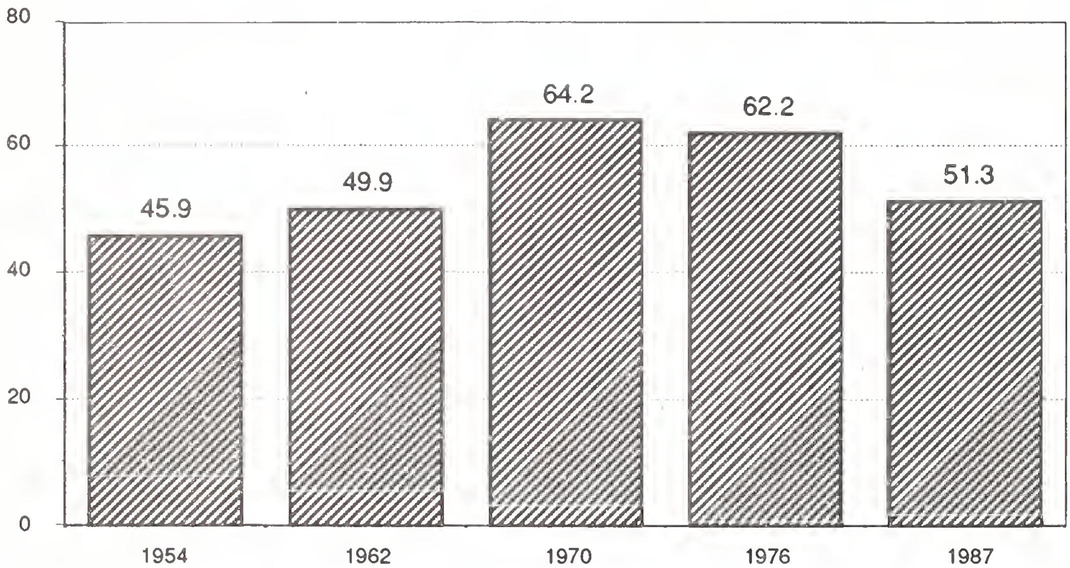


Table 25—Sources of borrowed capital, by major function, fiscal 1970, 1976, and 1987

Major function and fiscal year	Cooperatives: Total	Cooperatives: With borrowed capital	Total borrowed capital	Percentage of total borrowed capital from: Banks for Cooperatives	Commercial banks	Bonds and notes issued by cooperatives	Leases and industrial development bonds	Other cooperatives	Other sources
	Number	Number	Million dollars	Percent[1]					
Marketing									
1970	2,504	(2)	985	71.1	9.0	13.4	(3)	(3)	6.5
1976	1,674	1,040	2,300	72.7	12.4	11.6	0.9	0.3	2.1
1987	1,625	1,051	3,678	62.2	9.8	8.4	(3)	(3)	19.5
Farm supply									
1970	2,315	(2)	450	50.8	12.3	13.7	(3)	(3)	23.2
1976	2,164	1,798	1,199	56.1	11.1	9.5	10.4	5.6	7.3
1987	1,719	1,151	1,277	50.3	4.4	4.0	(3)	(3)	41.3
Marketing/farm supply									
1970	2,470	(2)	1,331	63.7	6.4	25.7	(3)	(3)	4.2
1976	1,957	1,721	2,650	55.9	6.3	29.4	2.9	1.7	3.8
1987	1,229	958	2,315	34.7	7.8	30.5	(3)	(3)	26.9
All functions									
1970	7,289	(2)	2,766	64.2	8.3	19.4	(3)	(3)	8.1
1976	5,795	4,559	6,149	62.2	9.5	18.9	3.6	1.9	3.9
1987	4,573	3,160	7,271	51.3	8.2	14.7	(3)	(3)	25.7

[1] May not add to 100 percent due to rounding.
[2] Data on the number of cooperatives with borrowed capital were not collected for 1970.
[3] Capital from leases, industrial development bonds, and other cooperatives is included in other sources for 1970 and 1987.

largest declines between 1976 and 1987 occurred in the marketing and marketing/farm supply groups. The proportion of borrowed capital provided marketing/farm supply cooperatives by BCs declined 21 percentage points since 1976.

The proportion of borrowed capital provided by commercial banks and bonds and notes generally has dropped since 1976, or remained relatively stable. On the other hand, the proportion of borrowed capital provided by other sources increased substantially between 1976 and 1987. This increase was fairly evenly distributed across cooperative functions. However, farm supply cooperatives obtained proportionately more of their borrowed capital from other sources than other groups. In 1987, 41 percent of their borrowed capital came from other sources.

Table 26 shows the relationship between sources of borrowed capital and cooperative size. The proportion of cooperatives borrowing capital generally increases as cooperative size, as measured by total assets, increases (see figure 16). Forty-three percent of the cooperatives with assets of less than $500,000 held borrowed capital at the end of their 1987 fiscal year. In contrast, all cooperatives with assets of more than $500 million held borrowed capital.

The proportion of borrowed capital supplied by BCs (figure 17) at first increases, and then generally decreases as size increases. Thirty-three percent of the borrowed capital held by cooperatives with assets of less than $500,000 was provided by BCs. Seventy percent of the borrowed capital held by cooperatives with assets between $2.5 million and $5 million was provided by BCs. Only 30 percent of the borrowed capital held by cooperatives with assets of more than $500 million was provided by BCs.

The proportion of borrowed capital supplied by commercial banks (figure 18) generally decreases as size increases. Thirty-nine percent of the capital borrowed by cooperatives with assets of less than $500,000 was provided by commercial banks, while 6 percent of the capital borrowed by cooperatives with assets of more than $500 million was provided by commercial banks. However, there was a notable increase in the proportion of borrowed capital provided by commercial banks to cooperatives in the $25 million to $100 million size class.

The proportion of borrowed capital supplied through bonds and notes (figure 19)

Table 26—Sources of borrowed capital, by size of cooperative, fiscal 1987

Size (total assets)	Cooperatives		Total borrowed capital	Cooperatives with borrowed capital from			
	Total	With borrowed capital		Banks for Cooperatives	Commercial banks	Bonds and notes issued by cooperatives	Other sources
Million dollars	----- *Number* -----		*Million dollars*	---------- *Percent*[1] ----------			
Less than $0.5	777	331	23.2	32.9	38.6	6.2	22.3
$0.5 - 0.9	709	433	72.5	42.8	24.4	7.1	25.7
$1 - 2.4	1,556	1,141	278.1	63.6	13.4	7.8	15.2
$2.5 - 4.9	883	709	458.9	70.1	8.5	10.0	11.4
$5 - 9.9	406	334	422.4	65.3	9.9	13.2	11.6
$10 - 24.9	124	100	348.3	62.9	11.3	11.4	14.3
$25 - 99.9	67	62	905.8	58.4	18.5	5.8	17.4
$100 - 499.9	43	42	2,414.0	60.6	4.8	10.7	23.9
$500 and over	8	8	2,348.0	30.2	5.6	25.1	39.2
All sizes	4,573	3,160	7,271.3	51.3	8.2	14.7	25.7

[1] May not add to 100 percent due to rounding.

Figure 16—Percentage of Cooperatives with Borrowed Capital, by Cooperative Size, Fiscal 1987

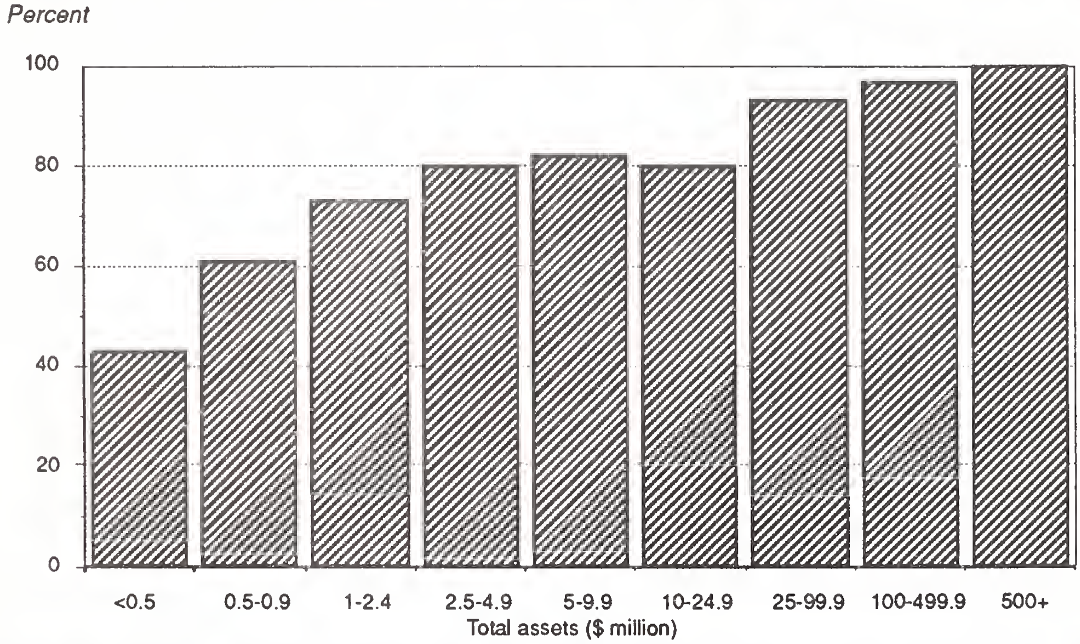


Figure 17—Percentage of Borrowed Capital Provided by Banks for Cooperatives, by Cooperative Size, Fiscal 1987

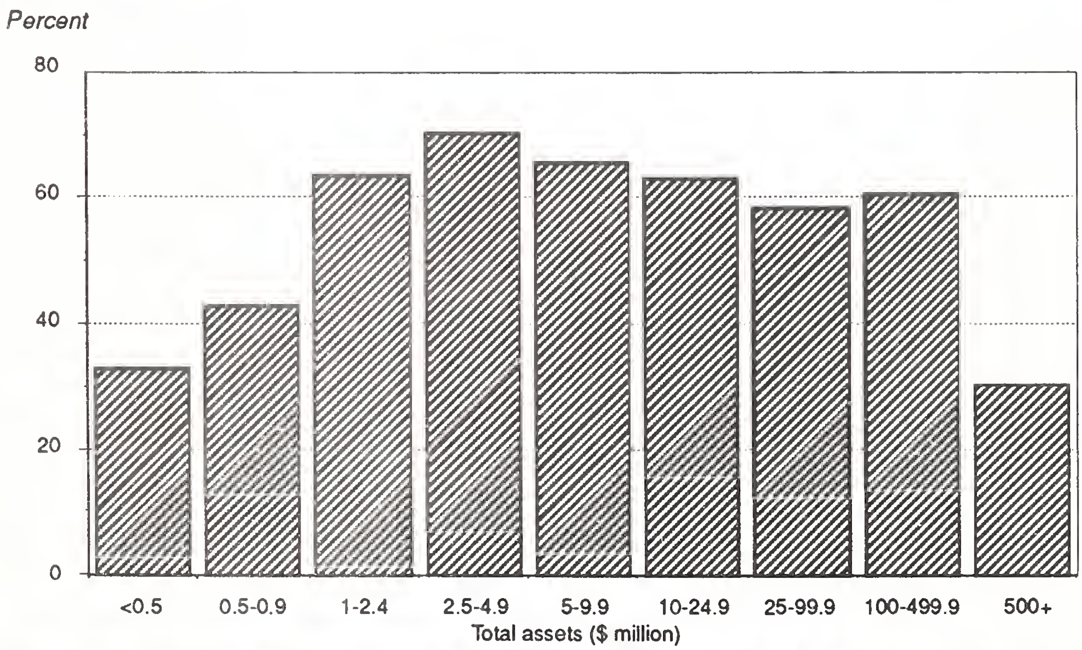


Figure 18—Percentage of Borrowed Capital Provided by Commercial Banks, by Cooperative Size, Fiscal 1987

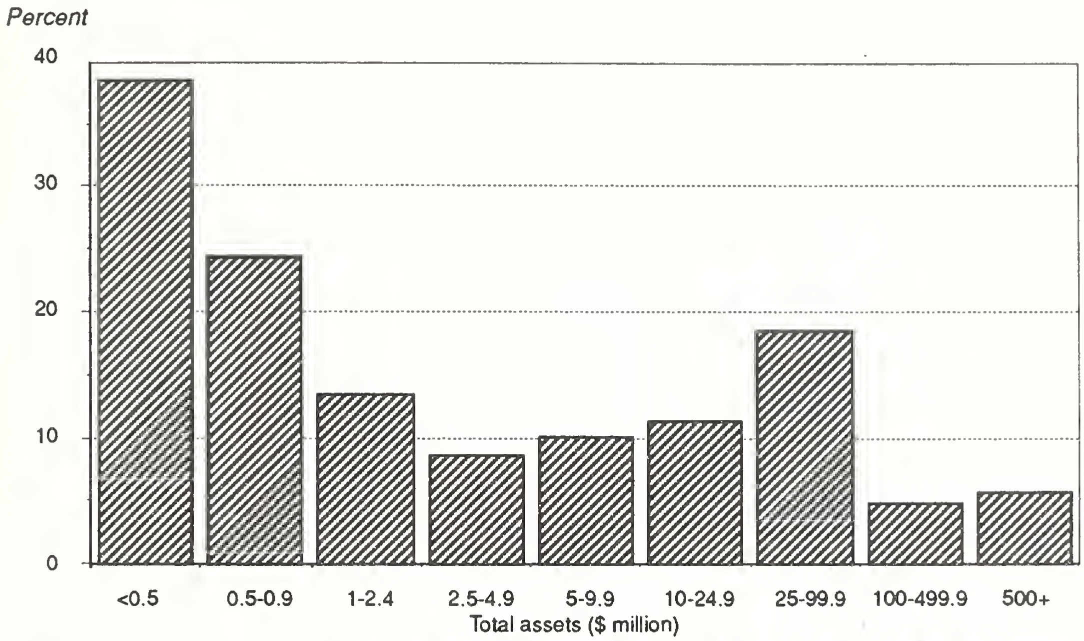
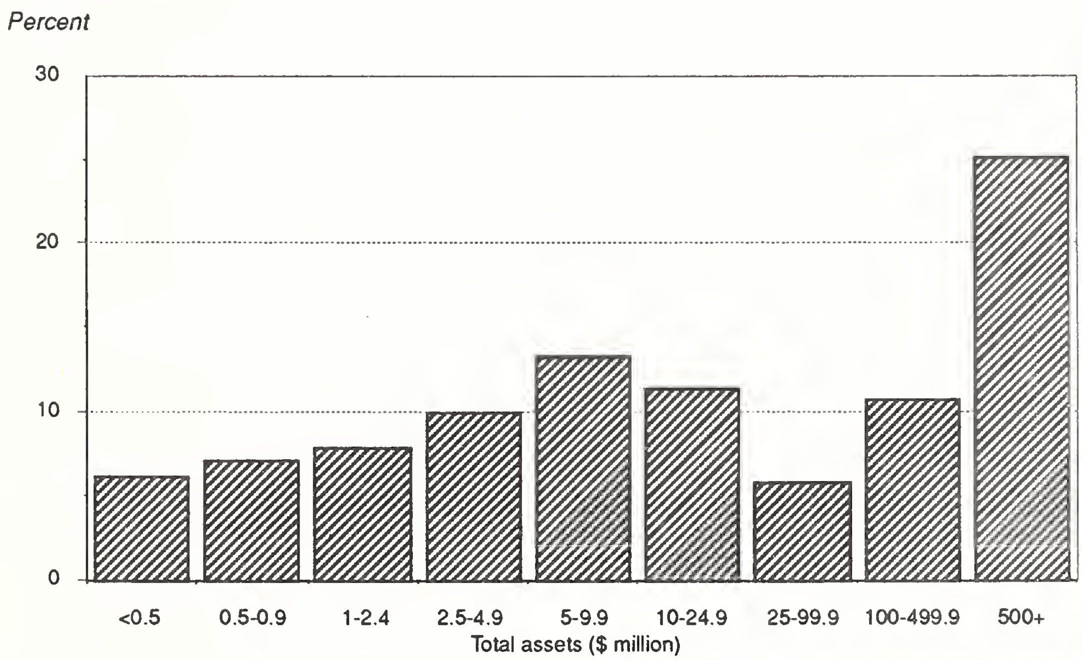


Figure 19—Percentage of Borrowed Capital Provided by Bonds and Notes, by Cooperative Size, Fiscal 1987



increases as size increases from less than $500,000 in total assets to between $5 million and $10 million. At that point, there is a decline in this proportion. Cooperatives between $25 million and $100 million in total assets have the lowest proportion of borrowed capital provided by bonds and notes. However, cooperatives with total assets of more than $500 million have the highest proportion. Over a quarter of their borrowed capital came from bonds and notes.

The proportion of borrowed capital supplied by other sources (figure 20) generally declines, and then increases, as cooperative size increases. Cooperatives with assets of less than $1 million obtained from about one-fifth to one-fourth of their borrowed capital from other sources. For cooperatives with total assets of between $2.5 million and $10 million, this proportion dropped to about one-tenth. In contrast, cooperatives with assets of more than $500 million obtained nearly two-fifths of their borrowed capital from other sources.

BCs provide nearly 60 percent or more of the borrowed capital for most cooperative size categories. However, BCs provide proportionately less borrowed capital to small cooperatives with assets of less than $1 million, and to the very largest cooperatives, with assets of more than $500 million.

Commercial banks provide much of this difference for the smallest cooperatives. Commercial banks provided 39 percent of the borrowed capital for cooperatives with assets less than $500,000. Large cooperatives, cooperatives with assets of $100 million and more, obtained only about 5 percent of their borrowed capital from commercial banks. Bonds and notes provided these cooperatives with an important source of borrowed capital. Cooperatives with assets of $500 million or more obtained a quarter of their borrowed capital from these sources. Other sources of borrowed capital were important for the smallest and largest cooperatives.

The very largest cooperatives, those with total assets of $500 million or more, are exceptional from how their borrowing practices differ from other cooperatives (see figure 21). These eight cooperatives received only 36 percent of their borrowed capital from banks (both BCs and commercial banks), compared with 71 percent for

Figure 20—Percentage of Borrowed Capital Provided by Other Sources, by Cooperative Size, Fiscal 1987

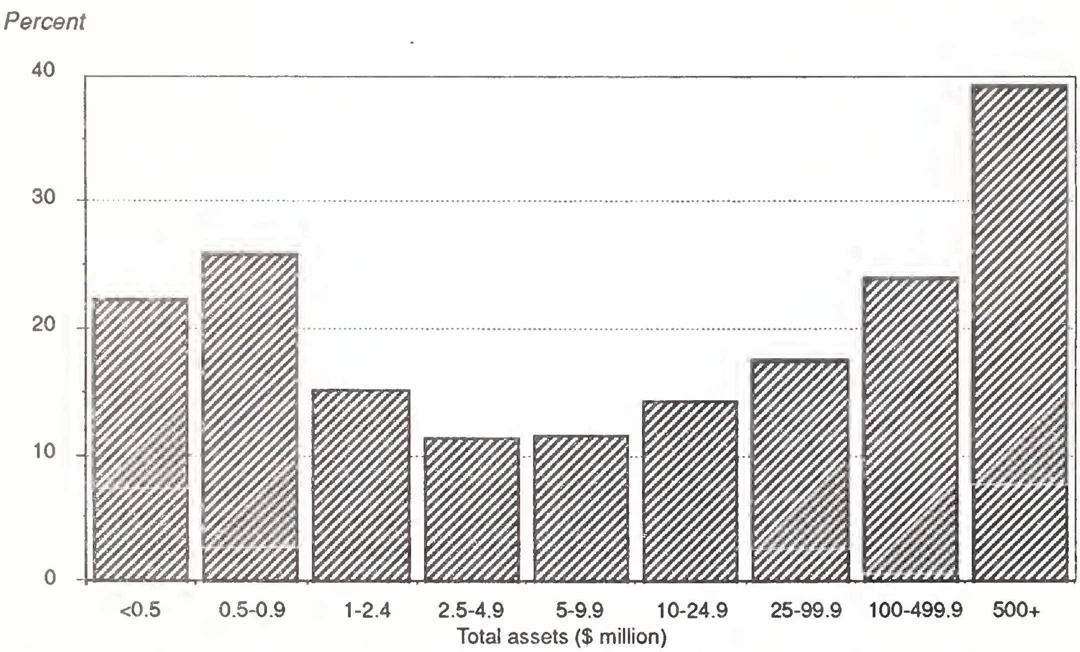
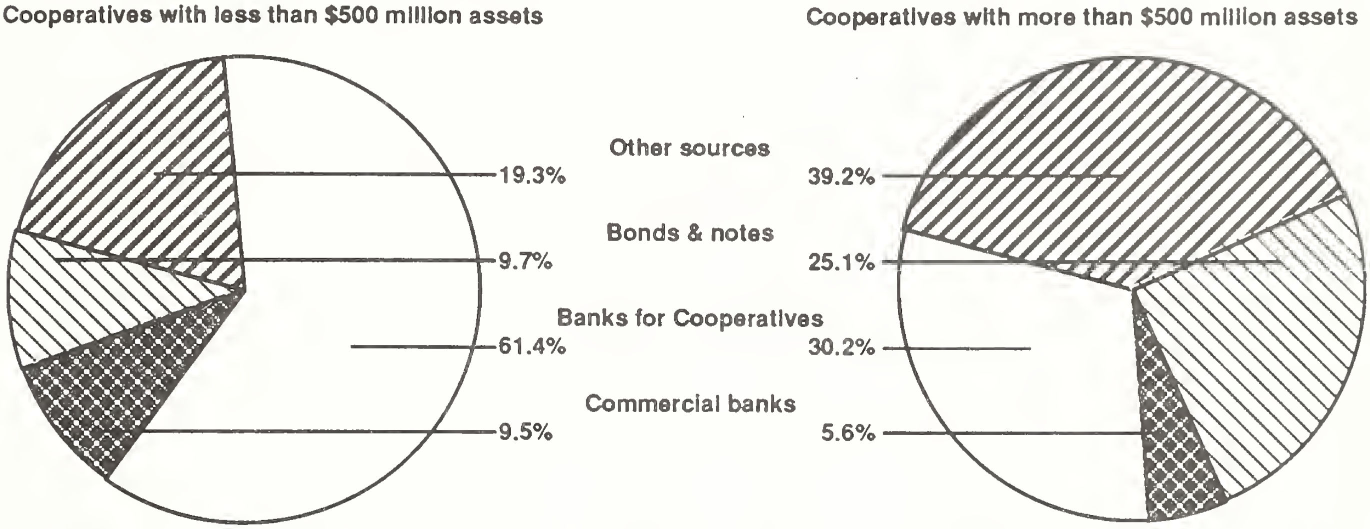


Figure 21—Sources of Borrowed Capital, Largest Cooperatives Compared with All Others, Fiscal 1987



all other cooperatives. The largest eight cooperatives received 64 percent of their borrowed capital from bonds and notes and from other sources.

Table 27 shows the proportion of borrowed capital from each of several sources for each of the 12 farm credit districts. Between 1976 and 1987, there were declines in the proportion of borrowed capital provided by BCs in each of the districts, except for Baltimore, Louisville, and Wichita. The Baltimore district had the highest proportion of borrowed capital provided by BCs. More than three-fourths of all capital borrowed by cooperatives in that district came from BCs. The Springfield district had the lowest proportion, 28 percent. The Columbia district had the largest percentage decline. The proportion of borrowed capital provided by BCs dropped 34 percentage points between 1976 and 1987 in that district.

The Sacramento district had the largest proportion of borrowed capital provided by commercial banks. In 1987, the proportion of borrowed capital provided by commercial banks was 17 percent. In 1976, more than one-fourth of the borrowed capital used by cooperatives in the Sacramento district was provided by commercial banks.

The St. Louis district had the largest proportion of borrowed capital provided through bonds and notes. Nearly one-third of the borrowed capital used by the cooperatives in this district were provided through bonds and notes issued by the cooperatives themselves. The Springfield district had the largest proportion of borrowed capital provided by other sources. Thirty-eight percent of the capital borrowed by cooperatives in that district came from other sources, and another 26 percent came from bonds and notes.

Table 28 shows the number of cooperatives with borrowed capital from each of several sources by farm credit district. The Wichita district had the highest proportion of borrowers. Eighty-five percent of the cooperatives in that district held borrowed capital at the end of their 1987 fiscal years. The Columbia district had the lowest proportion (53 percent) of cooperative borrowers.

The Wichita and Louisville districts had the highest proportion of borrowers from BCs; about 84 percent of the cooperative borrowers in those districts borrowed capital from BCs. The lowest proportion was in the Baltimore district, where only 41 percent of borrowers had BC loans.

The Columbia, Texas, and Sacramento farm credit districts had the highest proportion of borrowers with commercial bank loans. About 35 percent of the cooperatives with borrowed capital in these districts held loans from commercial banks. The Baltimore district had the highest

Table 27—Sources of borrowed capital, by farm credit district, fiscal 1970, 1976, and 1987

Farm credit district and fiscal year		Total borrowed capital	Percentage of total borrowed capital from					
			Banks for Cooperatives	Commercial banks	Bonds and notes issued by cooperative	Leases and industrial development bonds	Other cooperatives	Other sources
		Million dollars	*Percent*[1]					
Springfield	1970	284	39.8	9.0	45.3	(2)	(2)	5.9
	1976	426	44.1	4.9	46.0	2.4	1.2	1.4
	1987	1,141	28.0	8.8	25.8	(2)	(2)	37.5
Baltimore	1970	100	69.3	3.7	16.8	(2)	(2)	10.2
	1976	148	64.8	1.0	19.6	6.3	6.9	1.4
	1987	190	75.9	2.5	4.6	(2)	(2)	17.0
Columbia	1970	173	81.2	4.5	7.9	(2)	(2)	6.4
	1976	437	80.0	1.8	11.7	3.3	0.2	3.0
	1987	378	45.6	7.3	20.6	(2)	(2)	26.6
Louisville	1970	241	63.5	7.5	21.8	(2)	(2)	7.2
	1976	414	62.0	8.5	20.5	0.6	4.9	3.5
	1987	388	70.4	4.7	13.5	(2)	(2)	11.5
Jackson	1970	129	76.5	1.0	13.2	(2)	(2)	9.3
	1976	292	83.9	2.5	6.3	4.0	1.5	1.8
	1987	221	58.1	2.7	4.9	(2)	(2)	34.2
St. Louis	1970	431	54.0	11.7	28.3	(2)	(2)	6.0
	1976	1,499	41.2	9.1	31.9	7.2	0.9	9.7
	1987	1,121	38.5	3.2	31.7	(2)	(2)	26.6
St. Paul	1970	367	62.0	4.9	19.5	(2)	(2)	13.6
	1976	832	67.2	13.0	10.4	5.2	2.7	1.5
	1987	1,052	57.4	9.8	5.8	(2)	(2)	27.0
Omaha	1970	207	68.8	4.2	15.9	(2)	(2)	11.1
	1976	396	72.2	7.2	11.8	2.1	5.8	0.9
	1987	346	67.1	5.5	7.9	(2)	(2)	19.5
Wichita	1970	176	76.8	2.3	12.7	(2)	(2)	8.2
	1976	366	67.4	3.1	23.1	2.3	2.9	1.2
	1987	510	67.4	4.2	10.7	(2)	(2)	17.6
Texas	1970	128	79.4	2.4	8.0	(2)	(2)	10.2
	1976	312	85.1	3.5	6.9	(3)	0.5	4.0
	1987	372	62.1	7.4	4.1	(2)	(2)	26.4
Sacramento	1970	337	71.2	20.8	1.7	(2)	(2)	6.3
	1976	783	67.0	26.1	4.4	0.5	0.3	1.7
	1987	1,206	54.8	16.5	5.5	(2)	(2)	23.1
Spokane	1970	193	63.7	9.7	20.1	(2)	(2)	6.5
	1976	244	79.1	4.4	12.7	0	1.4	2.4
	1987	345	55.7	10.7	12.6	(2)	(2)	21.0
All districts	1970	2,766	64.2	8.3	19.4	(2)	(2)	8.1
	1976	6,149	62.2	9.5	18.9	3.6	1.9	3.9
	1987	7,271	51.3	8.2	14.7	(2)	(2)	25.7

[1] May not add to 100 percent due to rounding.
[2] Capital from leases, industrial development bonds, and other cooperatives is included in other sources for 1970 and 1987.
[3] Less than 0.05 percent.

Table 28—Number of cooperatives with capital from each source, by farm credit district, fiscal 1976 and 1987

Farm credit district and fiscal year		Cooperatives: Total	Cooperatives: With borrowed capital	Cooperatives with borrowed capital from: Banks for Cooperatives	Commercial banks	Bonds and notes issued by cooperative	Leases and industrial development bonds	Other cooperatives	Other sources
		Number							
Springfield	1976	278	191	159	21	24	1	1	10
	1987	173	118	74	27	13	(1)	(1)	70
Baltimore	1976	208	156	91	30	86	5	29	24
	1987	157	116	48	18	59	(1)	(1)	28
Columbia	1976	204	154	120	14	79	5	13	20
	1987	95	50	33	18	9	(1)	(1)	14
Louisville	1976	452	392	338	101	200	3	92	61
	1987	360	290	241	36	106	(1)	(1)	50
Jackson	1976	272	244	209	81	61	5	75	32
	1987	246	143	93	37	27	(1)	(1)	76
St. Louis	1976	490	392	238	66	231	8	33	46
	1987	435	304	221	78	95	(1)	(1)	85
St. Paul	1976	1,474	1,081	586	338	427	15	183	142
	1987	1,097	698	476	116	184	(1)	(1)	246
Omaha	1976	930	779	476	195	461	22	142	92
	1987	745	504	300	77	197	(1)	(1)	183
Wichita	1976	473	442	361	73	272	6	118	28
	1987	428	363	306	69	162	(1)	(1)	72
Texas	1976	368	261	173	91	66	1	34	39
	1987	323	212	119	76	17	(1)	(1)	47
Sacramento	1976	287	206	127	83	38	9	11	35
	1987	255	179	107	61	8	(1)	(1)	56
Spokane	1976	359	261	164	49	59	0	41	37
	1987	259	183	103	42	40	(1)	(1)	63
All districts	1976	5,795	4,559	3,042	1,142	2,004	80	772	566
	1987	4,573	3,160	2,121	655	916	(1)	(1)	990

[1] Cooperatives with capital from leases, industrial development bonds, and other cooperatives are included in other sources for 1987.

proportion of borrowers with borrowed capital obtained from bonds and notes. Fifty-one percent of the borrowers held capital obtained by issuing bonds and notes. On the other hand, only 5 percent of the borrowers in the Sacramento district held capital obtained from bonds and notes. Fifty-nine percent of the borrowers in the Springfield district borrowed capital from other sources, the highest proportion of borrowers among the 12 districts.

FINANCIAL RATIO ANALYSIS

The analysis in this section was conducted using three financial ratios: (a) the current ratio, (b) a debt/equity ratio, and (c) a modified interest coverage ratio. These ratios were selected according to three criteria: (a) the availability of survey data for computing the ratios, (b) the availability of published industry ratios for comparisons, and (c) an objective of assessing the overall financial condition of cooperatives with a minimum number of ratios.

The *current ratio* is a standard measure of liquidity, or the ability of a firm to meet its current obligations as they come due. It is computed by dividing total current assets by total current liabilities. Generally, a higher current ratio indicates a greater cushion between current obligations and the firm's ability to pay them, although the composition and quality of current assets are critical factors in determining a firm's liquidity.

The *debt/equity ratio* used in this analysis is defined as total liabilities divided by total equity. It is a measure of solvency, or the ability of a firm to meet its total obligations over the long run; it represents the relationship between the amount of financing provided by creditors and that contributed by owners. Generally, a higher debt/equity ratio indicates greater vulnerability to business downturns and greater risk to creditors. On the other hand, a low debt/equity ratio usually implies greater borrowing flexibility in the future. Although a low debt/equity ratio may indicate greater long-term financial safety, desirable ratios may vary substantially, depending on the particular requirements of different industries. A low debt/equity ratio may indicate an inefficient mix of borrowed and equity capital.

The *interest coverage ratio*, computed by dividing earnings before interest and income taxes by annual interest expense, measures a firm's ability to meet interest payments and take on additional debt. It not only considers the amount of debt held by the firm, but it also considers the level of earnings and interest rate. The following analysis uses a modified interest coverage ratio to take into account the supply of capital from per-unit capital retains. The modified interest coverage ratio was computed by dividing the sum of net margins before interest and taxes and the per-unit capital retain deductions by the annual interest expense. Because survey data did not include actual interest expense, this value was estimated by multiplying the total borrowed capital outstanding at the end of the fiscal year by a weighted average of seasonal and term interest rates charged by the BCs July 1 of the year.[7]

A cooperative's net margins can change rapidly from year to year. Therefore, the interest coverage ratio can also change rapidly. At an interest coverage ratio of 1.0, all net margins before interest and taxes are required to pay the yearly interest. At low interest coverage ratios, financial resources built over time can satisfy current needs, but a problem exists that may threaten the cooperative's future.

Table 29 shows the current, debt/equity, and interest coverage ratios by principal product or function for fiscal year 1987. Cotton marketing cooperatives had the lowest current ratio whereas both cotton ginning and service cooperatives had current ratios above 2.0. No group had a current ratio below 1.0. On average, cooperatives could have met current obligations 1.5 times.

In addition to having the highest current ratio, service cooperatives had the lowest debt/equity ratio. Lowest debt/equity ratio represents the least reliance on debt financing. Cotton ginning, local farm supply, and interregional manufacturing cooperatives also had debt/equity ratios of less than 1.0. Miscellaneous marketing cooperatives had the highest debt/equity ratio (3.55). For this group, loans and other liabilities were three and one-half times their equity. On average, cooperative debt exceeded equity by 16 percent.

Cotton ginning cooperatives had the highest interest coverage ratio. The average cotton ginning cooperative could have covered its interest expense over 15 times. Interregional manufacturing cooperatives had the lowest interest coverage ratio. They could have covered their interest expense an average of 1.35 times. No cooperative group had an interest coverage ratio of less than 1.0. On average, cooperatives could have covered their interest expense 3.28 times.

Local cooperatives generally had stronger ratios than their regional counterparts handling the same products or filling the same function. Both local grain and farm supply cooperatives had higher current and interest coverage ratios and lower debt/equity ratios than their regional cooperatives.

The three financial ratios are related, but each examines a financial strength in a different way. Cotton and dairy marketing cooperatives had current ratios below the average of all cooperatives, and they also relied more on debt than the average. However, these two groups had sufficient net margins to bring their interest coverage ratio above the average of all groups. Conversely, interregional manufacturing cooperatives had strong current ratios and debt/equity ratios that indicated lower than average levels of debt. But this group had relatively low net margins, and their interest coverage ratio was below average.

Table 30 compares 1987 ratios for market-

[7] Interest rates used were 8.27 percent for 1970, 7.32 percent for 1976, and 10.91 percent for 1987.

Table 29—Selected financial ratios, by principal product or function, fiscal 1987

Principal product or function	Ratio		
	Current	Debt/equity	Interest coverage[1]
Cotton marketing	1.24	1.72	6.02
Cotton ginning	2.19	0.45	15.34
Dairy	1.29	1.55	4.40
Fruits, vegetables, nuts	1.30	2.13	2.69
Regional grain	1.31	1.60	2.07
Local grain	1.50	0.66	4.99
Sugar	1.30	1.37	2.02
Livestock, wool, poultry	1.54	1.00	4.33
Miscellaneous marketing	1.26	3.55	8.08
Interregional mfg.	1.95	0.91	1.35
Regional farm supply	1.48	1.38	2.16
Local farm supply	1.93	0.53	4.37
Service	2.60	0.36	10.32
Large diversified	1.58	2.54	2.35
All products/functions	1.48	1.16	3.28

[1] Interest expense used to compute this ratio was estimated by multiplying total borrowed capital outstanding at the end of the fiscal year by an average of seasonal and term interest rates charged by the Banks for Cooperatives during the year.

Table 30—Selected financial ratios, by major function, fiscal 1970, 1976, and 1987

Major function and fiscal year	Ratio		
	Current	Debt/equity	Interest coverage[1]
Marketing			
1970	(2)	1.33	(2)
1976	1.20	1.86	4.52
1987	1.34	1.43	3.63
Farm supply			
1970	(2)	0.77	(2)
1976	1.63	0.98	6.97
1987	1.92	0.70	2.88
Marketing/farm supply			
1970	(2)	1.21	(2)
1976	1.47	1.36	5.41
1987	1.54	1.17	2.94
All functions			
1970	(2)	1.15	3.43
1976	1.38	1.40	5.38
1987	1.48	1.16	3.28

[1] Interest expense used to compute this ratio was estimated by multiplying total borrowed capital outstanding at the end of the fiscal year by a weighted average of seasonal and term interest rates charged by the Banks for Cooperatives July 1 of the year.

[2] Data on current assets and liabilities were not collected for 1970. Neither were data on per-unit capital retains by major function, necessary for computing interest coverage ratio.

ing, farm supply, and marketing/farm supply cooperatives to 1970 and 1976 ratios. The current and debt/equity ratios for all three cooperative classifications showed strengthening since 1976. The 1987 debt/equity ratios for farm supply and marketing/farm supply cooperatives were lower than both 1970 and 1976 levels.

Despite decreases in the debt/equity ratios between 1976 and 1987, the estimated interest coverage ratios fell for all three classifications. This was due to the inability of net margins to compensate for an increase in the interest rate. Whereas the average cooperative could have covered interest expense 5.38 times in 1976, this coverage fell to 3.28 in 1987.

Generally, current ratios for farm supply cooperatives have been higher, and debt/equity ratios have been lower, than for marketing cooperatives. This is due in part to substantial amounts of proceeds payable to members in settling accounts or closing pools in marketing cooperatives. These items appear on balance sheets as current liabilities until final payment of the products or settlement of pools.

Table 31 presents 1987 current, debt/equity, and interest coverage ratios by cooperative size. As figures 22, 23, and 24 demonstrate, there appear to be definite relationships between these ratios and cooperative size, as measured by total assets. Generally, the smallest cooperatives maintain the highest current ratios. As size increases, the current ratio drops, until cooperative size reaches $100 million. Cooperatives with more than $100 million assets show some strengthening of the current ratio.

The debt/equity ratio of cooperatives generally increases as cooperative size increases. Cooperatives with less than $0.5 million total assets had an average debt/equity ratio of 0.44, compared with a ratio of 1.88 for cooperatives with more than $500 million assets.

Medium-size cooperatives (assets in range of $1 million to $25 million) generally had the highest interest coverage ratios. The interest coverage ratios for cooperatives with less than $1 million assets were substantially lower, and the ratios for cooperatives with more than $25 million decrease as assets increase. Cooperatives with assets in the range of $1 million to $2.5 million had the largest average interest coverage ratio (6.84).

Table 32 shows the average current,

Table 31—Selected financial ratios, by size of cooperative, fiscal 1987

Size (total assets) (mil. dol.)	Ratio		
	Current	Debt/equity	Interest coverage[1]
Less than $0.5	2.43	0.44	4.61
$0.5 - 0.9	2.01	0.51	4.76
$1 - 2.4	1.97	0.45	6.84
$2.5 - 4.9	1.64	0.58	5.70
$5 - 9.9	1.52	0.73	5.78
$10 - 24.9	1.41	0.95	5.19
$25 - 99.9	1.33	1.47	3.43
$100 - 499.9	1.36	1.72	2.91
$500 and over	1.51	1.88	1.91
All sizes	1.48	1.16	3.28

[1] Interest expense used to compute this ratio was estimated by multiplying total borrowed capital outstanding at the end of the fiscal year by a weighted average of seasonal and term interest rates charged by the Banks for Cooperatives July 1 of the year.

Figure 22—Current Ratio, by Cooperative Size, Fiscal 1987

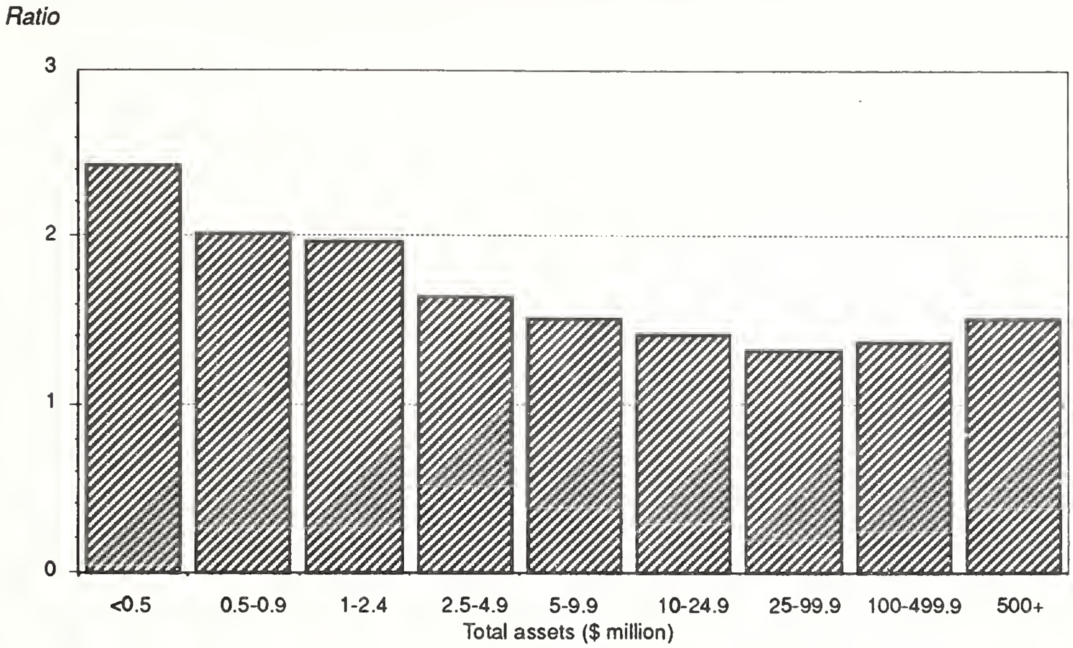


Figure 23—Debt/Equity Ratio, by Cooperative Size, Fiscal 1987

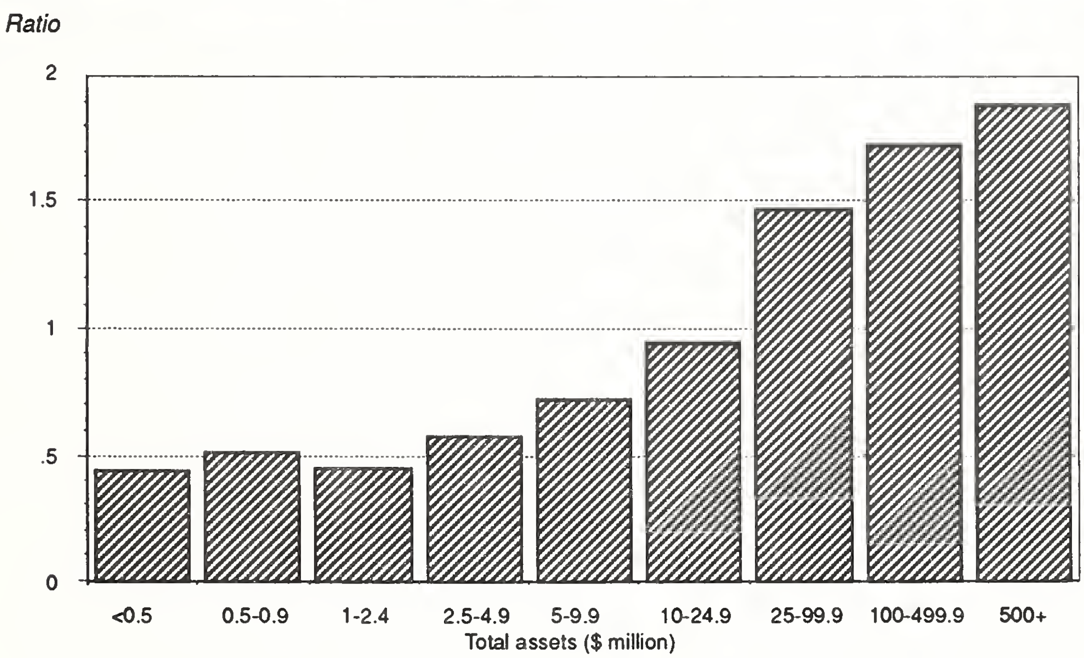
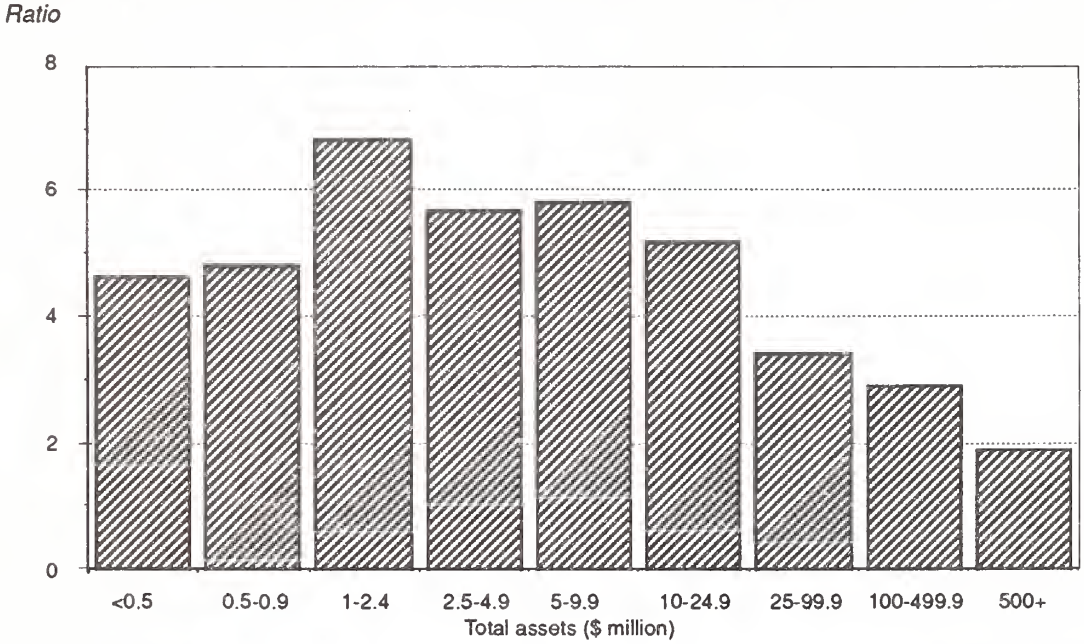


Figure 24—Interest Coverage Ratio, by Cooperative Size, Fiscal 1987



debt/equity, and interest coverage ratios for the 12 farm credit districts. Most of the districts experienced a general strengthening of their current and debt/equity ratios between 1976 and 1987. However, all but one of the districts had a lower interest coverage ratio in 1987.

Tables 33 through 41 show the distribution of cooperatives and cooperative total assets according to the cooperatives' current, debt/equity, and interest coverage ratios. The primary purpose in presenting these tables is to give individual cooperatives information for comparison with their own operations. In tables 33, 36, and 39, cooperatives are classified by principal product or function. In tables 34, 37, and 40, cooperatives are classified by size, and in tables 35, 38, and 41, they are classified by farm credit district.

Generally, the smaller cooperatives had stronger financial ratios than larger cooperatives. However, the small cooperatives had more than their share of cooperatives with weak financial ratios. This was especially true for the interest coverage ratio (table 40). The two smallest size classifications had the largest proportion of cooperatives with no borrowed capital. However, these two groups had the largest proportion of cooperatives with interest coverage ratios below 1.0. Fourteen percent of these cooperatives were not generating enough current net margins before interest and taxes to pay their current interest.

Table 36 shows that more than one-third of the total assets of cotton marketing cooperatives and cooperatives marketing fruits, vegetables, and nuts were held by cooperatives with debt/equity ratios of 3.00 or more. Nearly three-fourths of the assets of miscellaneous marketing cooperatives were held by cooperatives with debt/equity ratios of 3.00 or more. Nearly one-third of the large diversified cooperatives had debt/equity ratios of 3.00 or more, and these cooperatives held more than one-half the group's total assets.

In table 39, cooperatives without borrowed capital are separated from other cooperatives because computation of interest coverage ratios for these cooperatives is meaningless. Thirty-one percent of all cooperatives held no borrowed capital, although these cooperatives represented

Table 32—Selected financial ratios, by farm credit district, fiscal 1970, 1976, and 1987

Farm credit district and fiscal year		Ratio: Current	Ratio: Debt/equity	Ratio: Interest coverage[1]
Springfield	1970	(2)	1.94	(3)
	1976	1.56	2.60	3.42
	1987	1.58	2.48	2.16
Baltimore	1970	(2)	1.01	(3)
	1976	1.74	1.12	5.50
	1987	1.56	1.12	3.90
Columbia	1970	(2)	1.24	(3)
	1976	1.32	1.70	5.52
	1987	1.44	1.66	5.19
Louisville	1970	(2)	1.27	(3)
	1976	1.41	1.26	5.91
	1987	1.25	1.40	3.14
Jackson	1970	(2)	1.14	(3)
	1976	1.39	1.44	5.69
	1987	1.81	0.79	2.39
St. Louis	1970	(2)	1.34	(3)
	1976	1.41	1.79	4.84
	1987	1.63	0.96	3.27
St. Paul	1970	(2)	0.80	(3)
	1976	1.37	1.09	5.28
	1987	1.49	0.95	2.89
Omaha	1970	(2)	0.89	(3)
	1976	1.52	0.86	8.83
	1987	1.69	0.60	5.78
Wichita	1970	(2)	0.91	(3)
	1976	1.38	0.98	6.32
	1987	1.62	0.81	2.95
Texas	1970	(2)	1.02	(3)
	1976	1.28	1.31	4.54
	1987	1.74	0.95	4.99
Sacramento	1970	(2)	1.43	(3)
	1976	1.21	2.05	5.37
	1987	1.27	2.02	3.04
Spokane	1970	(2)	1.62	(3)
	1976	1.33	1.44	5.09
	1987	1.29	1.12	3.44
All districts	1970	(2)	1.15	3.43
	1976	1.38	1.40	5.38
	1987	1.48	1.16	3.28

[1] Interest expense used to compute this ratio was estimated by multiplying total borrowed capital outstanding at the end of the fiscal year by a weighted average of seasonal and term interest rates charged by the Banks for Cooperatives July 1 of the year.
[2] Data on current assets and liabilities were not collected for 1970.
[3] Data on net margins and per-unit capital retains by farm credit district necessary for computing interest coverage ratios were not collected for 1970.

Table 33—Frequency distribution of cooperatives and total assets according to current ratio, by principal product or function, fiscal 1987

Principal product or function	Current ratio: Less than 1.00	1.00 - 1.24	1.25 - 1.49	1.50 - 1.99	2.00 - 2.99	3.00 - 4.99	5.00 and over
				Percent[1]			
Cotton marketing							
Cooperatives	0	42.5	15.0	32.5	10.0	0	0
Total assets	0	57.0	16.6	14.9	11.6	0	0
Cotton ginning							
Cooperatives	13.2	14.7	11.6	15.0	15.9	12.2	17.4
Total assets	8.6	10.3	12.2	12.8	13.6	33.5	8.9
Dairy							
Cooperatives	8.4	22.4	21.2	17.0	13.7	1.5	15.9
Total assets	11.9	34.4	36.1	13.6	1.4	0.1	2.5
Fruits, vegetables, nuts							
Cooperatives	17.2	24.6	17.9	9.1	5.9	7.2	18.1
Total assets	3.0	32.5	50.4	12.5	0.5	0.3	0.9
Regional grain							
Cooperatives	0	55.5	22.2	0	22.2	0	0
Total assets	0	58.4	22.3	0	19.2	0	0
Local grain							
Cooperatives	5.2	21.2	17.5	17.3	21.0	9.5	8.3
Total assets	4.7	28.6	21.0	18.7	16.7	6.0	4.3
Sugar							
Cooperatives	21.0	27.7	10.0	15.0	14.7	0	11.7
Total assets	6.6	32.6	17.1	37.7	4.6	0	1.3
Livestock, wool, poultry							
Cooperatives	0.9	12.4	5.5	11.2	9.8	10.7	49.4
Total assets	0.6	29.4	14.9	35.0	10.7	5.8	3.6
Miscellaneous marketing							
Cooperatives	15.2	14.0	14.9	13.0	9.8	11.2	21.9
Total assets	4.2	68.5	5.1	2.0	1.0	2.2	16.9
Interregional mfg.							
Cooperatives	0	33.3	0	33.3	33.3	0	0
Total assets	0	9.4	0	24.8	65.7	0	0
Regional farm supply							
Cooperatives	0	9.0	52.9	28.0	10.2	0	0
Total assets	0	2.4	71.0	16.3	10.3	0	0
Local farm supply							
Cooperatives	3.3	9.7	11.0	16.3	18.4	16.3	25.0
Total assets	2.2	11.5	15.4	21.6	18.9	17.0	13.3
Service							
Cooperatives	10.8	4.7	3.0	6.3	21.2	20.7	33.4
Total assets	6.2	1.9	7.3	5.9	47.5	23.2	8.1
Large diversified							
Cooperatives	0	0	67.2	32.3	0	0	0
Total assets	0	0	46.5	53.5	0	0	0
All products/functions							
Cooperatives	6.1	15.9	14.1	15.8	17.8	12.0	18.3
Total assets	3.5	23.5	31.7	20.1	13.2	4.4	3.6

[1] May not equal 100 percent due to rounding.

Table 34—Frequency distribution of cooperatives and total assets according to current ratio, by size of cooperative, fiscal 1987

Size (total assets)	Current ratio						
	Less than 1.00	1.00 - 1.24	1.25 - 1.49	1.50 - 1.99	2.00 - 2.99	3.00 - 4.99	5.00 and over
Million dollars	*Percent*[1]						
Less than $0.5							
Cooperatives	6.9	8.7	6.6	7.5	14.4	12.8	43.1
Total assets	5.8	9.2	8.2	9.8	16.3	17.0	33.6
$0.5 - 0.9							
Cooperatives	8.2	13.8	10.4	16.0	14.9	11.4	25.3
Total assets	7.9	13.6	11.0	16.2	15.3	11.2	24.6
$1 - 2.4							
Cooperatives	5.1	13.0	15.3	15.1	20.0	15.3	16.2
Total assets	5.2	13.3	15.3	15.2	20.4	15.0	15.5
$2.5 - 4.9							
Cooperatives	7.1	18.7	14.9	19.6	24.3	9.2	6.2
Total assets	7.2	19.4	16.0	18.7	23.8	9.3	5.6
$5 - 9.9							
Cooperatives	2.1	26.7	21.3	24.6	12.0	10.4	2.9
Total assets	2.4	28.9	20.9	24.8	11.0	9.2	2.8
$10 - 24.9							
Cooperatives	6.3	29.6	27.0	16.7	11.9	6.1	2.4
Total assets	5.5	31.6	24.8	18.2	11.8	6.0	2.1
$25 - 99.9							
Cooperatives	8.8	42.4	19.2	25.0	1.5	0	3.1
Total assets	8.2	40.1	22.9	23.2	1.5	0	4.2
$100 - 499.9							
Cooperatives	3.4	44.6	25.2	14.9	9.7	2.2	0
Total assets	1.9	36.5	32.1	17.1	10.8	1.6	0
$500 and over							
Cooperatives	0	0	75.0	12.5	12.5	0	0
Total assets	0	0	60.7	24.3	15.0	0	0
All sizes							
Cooperatives	6.1	15.9	14.1	15.8	17.8	12.0	18.3
Total assets	3.5	23.5	31.7	20.1	13.2	4.4	3.6

[1] May not equal 100 percent due to rounding.

Table 35—Frequency distribution of cooperatives and total assets according to current ratio, by farm credit district, fiscal 1987

Farm credit district	Current ratio						
	Less than 1.00	1.00 - 1.24	1.25 - 1.49	1.50 - 1.99	2.00 - 2.99	3.00 - 4.99	5.00 and over
	Percent[1]						
Springfield							
Cooperatives	10.1	14.3	19.5	14.7	16.7	7.7	17.0
Total assets	6.2	16.3	16.3	57.4	1.2	1.2	1.3
Baltimore							
Cooperatives	16.0	17.4	4.6	11.4	8.1	13.1	29.4
Total assets	12.0	9.3	13.7	50.9	4.7	3.5	5.9
Columbia							
Cooperatives	9.1	10.9	25.3	18.7	7.1	13.3	15.6
Total assets	4.3	29.7	54.8	3.6	0.9	1.8	5.0
Louisville							
Cooperatives	8.1	20.8	10.1	14.4	18.6	13.3	14.6
Total assets	3.5	63.4	11.6	5.5	10.0	4.0	2.1
Jackson							
Cooperatives	10.7	12.4	8.3	5.6	11.5	13.5	38.0
Total assets	4.3	15.7	4.3	20.5	35.2	8.7	11.3
St. Louis							
Cooperatives	1.6	14.3	13.5	19.8	20.5	17.0	13.3
Total assets	0.2	5.9	42.9	9.4	35.5	5.2	0.8
St. Paul							
Cooperatives	4.0	18.3	15.5	19.0	14.8	10.0	18.3
Total assets	2.2	22.8	41.1	18.1	6.9	3.5	5.4
Omaha							
Cooperatives	2.3	12.0	14.5	16.8	24.1	12.0	18.4
Total assets	1.9	18.5	20.5	24.0	23.3	5.9	5.8
Wichita							
Cooperatives	5.0	12.4	17.9	19.5	20.7	10.6	13.9
Total assets	1.8	7.2	30.8	36.1	11.4	6.4	6.3
Texas							
Cooperatives	9.4	13.8	12.5	13.4	16.7	12.2	21.9
Total assets	4.6	8.6	52.1	5.7	9.0	14.8	5.2
Sacramento							
Cooperatives	16.0	22.7	15.4	7.2	13.9	10.9	13.9
Total assets	2.4	43.3	36.5	12.2	3.1	1.5	1.0
Spokane							
Cooperatives	3.9	19.2	11.7	12.7	22.9	14.4	15.3
Total assets	13.6	41.1	16.0	11.8	10.8	3.5	3.2
All districts							
Cooperatives	6.1	15.9	14.1	15.8	17.8	12.0	18.3
Total assets	3.5	23.5	31.7	20.1	13.2	4.4	3.6

[1] May not equal 100 percent due to rounding.

Table 36—Frequency distribution of cooperatives and total assets according to debt/equity ratio, by principal product or function, fiscal 1987

Principle product or function	Debt/equity ratio					
	Less than 0.25	0.25 - 0.49	0.50 - 0.99	1.00 - 1.99	2.00 - 2.99	3.00 and over
Million dollar	*Percent*[1]					
Cotton marketing						
Cooperatives	0	0	47.5	42.5	5.0	5.0
Total assets	0	0	28.9	29.1	4.4	37.6
Cotton ginning						
Cooperatives	30.4	28.4	27.6	6.6	1.0	5.9
Total assets	20.3	46.5	22.7	5.5	0.5	4.5
Dairy						
Cooperatives	21.7	19.9	12.5	18.6	10.7	16.6
Total assets	2.8	2.3	14.9	40.2	24.9	15.0
Fruits, vegetables, nuts						
Cooperatives	18.5	7.5	17.1	28.4	10.8	17.7
Total assets	1.0	0.6	3.2	44.2	16.2	34.9
Regional grain						
Cooperatives	0	0	11.1	44.4	33.3	11.1
Total assets	0	0	9.6	48.6	36.5	5.4
Local grain						
Cooperatives	21.2	27.6	29.8	15.1	4.1	2.2
Total assets	13.2	24.3	34.0	19.5	6.6	2.5
Sugar						
Cooperatives	11.7	14.7	21.0	36.0	16.7	0
Total assets	1.3	4.6	7.8	51.0	35.3	0
Livestock, wool, poultry						
Cooperatives	54.9	10.3	11.5	10.8	3.2	9.4
Total assets	7.8	12.8	28.5	20.6	16.5	13.7
Miscellaneous marketing						
Cooperatives	26.7	10.1	14.2	10.4	6.7	31.9
Total assets	15.8	0.8	2.5	4.9	2.0	74.0
Interregional mfg.						
Cooperatives	0	0	33.3	33.3	16.7	16.7
Total assets	0	0	65.7	24.8	6.6	2.8
Regional farm supply						
Cooperatives	0	0	20.2	60.7	19.0	0
Total assets	0	0	12.1	80.5	7.4	0
Local farm supply						
Cooperatives	41.1	20.3	20.7	11.5	1.9	4.4
Total assets	32.7	21.2	27.2	15.6	1.8	1.5
Service						
Cooperatives	59.3	17.1	12.3	6.4	1.6	3.2
Total assets	47.0	26.9	17.1	6.7	1.0	1.4
Large diversified						
Cooperatives	0	0	0	66.7	0	33.3
Total assets	0	0	0	46.5	0	53.5
All products/functions						
Cooperatives	31.2	21.8	23.2	14.1	3.9	5.8
Total assets	8.4	9.1	19.6	36.4	11.4	15.1

[1] May not add to 100 percent due to rounding.

Table 37—Frequency distribution of cooperatives and total assets according to debt/equity ratio, by size of cooperative, fiscal 1987

Size (total assets)	Debt/equity ratio					
	Less than 0.25	0.25 - 0.49	0.50 - 0.99	1.00 - 1.99	2.00 - 2.99	3.00 and over
Million dollar	*Percent*[1]					
Less than $0.5						
Cooperatives	51.4	10.6	16.8	7.0	2.5	11.8
Total assets	49.2	12.2	20.6	8.3	3.4	6.2
$0.5 - 0.9						
Cooperatives	36.1	21.3	19.3	11.2	2.7	9.4
Total assets	35.2	22.0	20.0	11.6	2.8	8.3
$1 - 2.4						
Cooperatives	34.3	27.3	20.6	12.0	3.8	2.0
Total assets	33.8	28.0	20.3	12.3	3.4	2.2
$2.5 - 4.9						
Cooperatives	19.6	28.4	29.7	15.8	2.9	3.6
Total assets	19.2	28.2	30.0	15.8	3.1	3.8
$5 - 9.9						
Cooperatives	12.9	17.9	38.6	23.4	5.1	2.1
Total assets	11.6	16.2	39.2	25.1	5.7	2.2
$10 - 24.9						
Cooperatives	9.5	13.8	27.0	31.1	8.4	10.2
Total assets	9.0	13.7	27.2	31.1	9.5	9.7
$25 - 99.9						
Cooperatives	3.1	0	17.8	43.2	18.1	17.8
Total assets	4.2	0	15.3	41.1	21.8	17.7
$100 - 499.9						
Cooperatives	0	2.2	12.9	42.7	24.8	17.3
Total assets	0	1.6	12.1	46.4	24.7	15.2
$500 and over						
Cooperatives	0	0	12.5	62.5	0	25.0
Total assets	0	0	15.0	51.4	0	33.6
All sizes						
Cooperatives	31.2	21.8	23.2	14.1	3.9	5.8
Total assets	8.4	9.1	19.6	36.4	11.4	15.1

[1] May not add to 100 percent due to rounding.

Table 38—Frequency distribution of cooperatives and total assets according to debt/equity ratio, by farm credit district, fiscal 1987

Farm credit district	Debt/equity ratio					
	Less than 0.25	0.25 - 0.49	0.50 - 0.99	1.00 - 1.99	2.00 - 2.99	3.00 and over
	Percent[1]					
Springfield						
Cooperatives	17.7	7.7	23.4	21.6	10.8	18.7
Total assets	1.9	0.6	1.4	26.3	0.8	69.0
Baltimore						
Cooperatives	33.1	8.7	19.2	16.4	1.9	20.6
Total assets	8.3	4.5	12.5	62.6	0.3	11.7
Columbia						
Cooperatives	21.4	14.4	17.7	21.3	9.6	15.6
Total assets	5.4	1.0	4.8	55.1	23.9	9.8
Louisville						
Cooperatives	28.8	21.0	23.9	19.3	3.0	4.0
Total assets	8.1	8.3	12.4	43.7	11.4	16.1
Jackson						
Cooperatives	42.8	6.7	21.2	6.2	3.2	19.8
Total assets	19.0	5.6	45.0	15.1	13.1	2.2
St. Louis						
Cooperatives	30.4	23.1	26.4	13.9	3.3	2.9
Total assets	6.2	5.5	42.8	41.2	3.6	0.6
St. Paul						
Cooperatives	31.2	22.5	22.8	15.4	4.9	3.1
Total assets	10.4	10.2	15.7	57.2	4.7	1.9
Omaha						
Cooperatives	35.2	30.9	21.4	10.1	1.6	0.8
Total assets	16.0	27.7	29.8	24.4	1.6	0.5
Wichita						
Cooperatives	25.6	25.3	31.6	14.3	1.6	1.6
Total assets	13.4	15.3	25.2	26.5	17.9	1.7
Texas						
Cooperatives	38.1	25.2	22.6	8.2	2.1	3.8
Total assets	13.0	17.6	15.8	11.1	42.1	0.5
Sacramento						
Cooperatives	21.7	13.4	23.3	21.0	7.1	13.6
Total assets	1.5	3.1	6.5	26.6	29.2	33.1
Spokane						
Cooperatives	35.0	24.7	16.0	12.3	6.2	5.8
Total assets	10.1	13.0	20.4	19.7	7.3	29.4
All districts						
Cooperatives	31.2	21.8	23.2	14.1	3.9	5.8
Total assets	8.4	9.1	19.6	36.4	11.4	15.1

[1] May not add to 100 percent due to rounding

Table 39—Frequency distribution of cooperatives and total assets according to interest coverage ratio, by principal product or function, fiscal 1987

Principle product or function	Interest coverage ratio[1] Less than 1.00	1.00 - 1.99	2.00 - 2.99	3.00 - 4.99	5.00 - 9.99	10.00 and over	Cooperatives without borrowed capital
	Percent[2]						
Cotton marketing							
Cooperatives	5.0	10.0	10.0	27.5	10.0	37.5	0
Total assets	2.4	15.1	14.2	6.9	40.9	20.6	0
Cotton ginning							
Cooperatives	17.6	9.5	1.3	5.6	10.3	30.9	24.8
Total assets	8.1	10.2	0.2	3.2	9.5	46.4	22.2
Dairy							
Cooperatives	4.8	4.9	4.2	5.2	9.6	13.7	57.7
Total assets	3.8	9.8	26.7	19.7	12.9	19.2	7.9
Fruits, vegetables, nuts							
Cooperatives	3.7	11.8	6.7	17.0	6.7	13.4	40.7
Total assets	0.8	39.4	18.8	25.0	7.4	2.1	6.5
Regional grain							
Cooperatives	11.1	33.3	44.4	0	11.1	0	0
Total assets	5.9	36.0	48.6	0	9.6	0	0
Local grain							
Cooperatives	8.9	8.8	10.2	11.9	15.4	21.9	23.0
Total assets	7.0	11.8	12.5	14.1	18.2	21.5	15.0
Sugar							
Cooperatives	8.0	37.7	10.0	18.0	0	13.0	13.3
Total assets	1.2	50.1	33.5	9.3	0	3.0	3.0
Livestock, wool, poultry							
Cooperatives	3.2	4.6	6.9	4.6	8.9	3.0	68.8
Total assets	2.6	15.6	11.8	13.4	28.1	11.3	17.0
Miscellaneous marketing							
Cooperatives	12.4	12.5	6.8	6.0	1.5	6.7	54.2
Total assets	1.2	5.8	1.6	1.0	0.1	2.8	87.4
Interregional mfg.							
Cooperatives	16.7	16.7	33.3	16.7	0	16.7	0
Total assets	13.7	52.0	11.0	20.5	0	2.8	0
Regional farm supply							
Cooperatives	0	33.1	46.7	10.1	10.2	0	0
Total assets	0	30.3	57.6	1.7	10.3	0	0
Local farm supply							
Cooperatives	12.3	10.7	9.7	8.6	10.7	17.9	30.1
Total assets	9.6	12.1	12.3	12.6	10.5	20.4	22.5
Service							
Cooperatives	5.8	4.4	2.8	2.1	10.0	17.6	57.4
Total assets	1.4	5.7	3.9	6.9	7.8	41.1	33.2
Large diversified							
Cooperatives	0	66.7	0	0	33.3	0	0
Total assets	0	79.6	0	0	20.4	0	0
All products/functions							
Cooperatives	10.1	9.7	8.7	9.7	11.7	19.1	30.9
Total assets	4.6	28.7	20.8	12.1	12.2	11.4	10.2

[1] Interest expense used to compute this ratio was estimated by multiplying total borrowed capital outstanding at the end of the fiscal year by an average of seasonal and term interest rates charged by the Banks for Cooperatives during the year.
[2] May not add to 100 percent due to rounding.

Table 40—Frequency distribution of cooperatives and total assets according to interest coverage ratio, by size of cooperative, fiscal 1987

Size (total assets)	Interest coverage ratio[1] Less than 1.00	1.00 - 1.99	2.00 - 2.99	3.00 - 4.99	5.00 - 9.99	10.00 and over	Cooperatives without borrowed capital
Million dollars	*Percent* [2]						
Less than $0.5							
Cooperatives	14.0	5.3	5.0	2.5	7.9	7.9	57.3
Total assets	17.6	6.4	6.4	3.3	9.8	9.7	46.7
$0.5 - 0.9							
Cooperatives	14.5	12.5	5.6	7.4	8.7	12.4	39.0
Total assets	14.6	12.2	5.9	7.2	9.1	13.2	37.8
$1 - 2.4							
Cooperatives	8.9	8.2	6.5	10.1	13.1	26.5	26.7
Total assets	9.3	8.0	6.5	10.1	13.1	28.0	25.0
$2.5 - 4.9							
Cooperatives	10.1	10.1	14.3	11.6	13.8	20.3	19.7
Total assets	10.4	9.9	13.8	12.6	14.1	20.8	18.3
$5 - 9.9							
Cooperatives	4.2	12.3	10.4	16.7	13.0	25.5	17.8
Total assets	4.0	13.3	10.7	17.3	12.7	24.4	17.6
$10 - 24.9							
Cooperatives	3.5	14.2	20.0	17.9	13.1	11.7	19.6
Total assets	3.3	15.5	19.7	17.1	13.6	12.3	18.4
$25 - 99.9							
Cooperatives	1.5	24.0	16.8	20.6	13.3	17.5	6.4
Total assets	3.1	27.4	19.1	15.2	13.8	15.1	6.4
$100 - 499.9							
Cooperatives	4.7	24.6	28.8	15.6	15.2	7.8	3.2
Total assets	4.4	20.9	35.4	17.8	12.6	4.9	4.1
$500 and over							
Cooperatives	0	75.0	12.5	0	12.5	0	0
Total assets	0	72.0	18.7	0	9.3	0	0
All sizes							
Cooperatives	10.1	9.7	8.7	9.7	11.7	19.1	30.9
Total assets	4.6	28.7	20.8	12.1	12.2	11.4	10.2

[1] Interest expense used to compute this ratio was estimated by multiplying total borrowed capital outstanding at the end of the fiscal year by an average of seasonal and term interest rates charged by the Banks for Cooperatives during the year.

Table 41—Frequency distribution of cooperatives and total assets according to interest coverage ratio, by farm credit district, fiscal 1987

Farm credit district	Interest coverage ratio[1] Less than 1.00	1.00 - 1.99	2.00 - 2.99	3.00 - 4.99	5.00 - 9.99	10.00 and over	Cooperatives without borrowed capital
				Percent[2]			
Springfield							
Cooperatives	9.3	12.1	11.4	9.4	19.1	7.4	31.3
Total assets	0.4	61.7	22.5	7.6	2.2	2.5	3.0
Baltimore							
Cooperatives	17.4	7.5	9.4	4.2	8.4	27.0	26.1
Total assets	2.8	15.8	41.5	0.6	15.7	18.3	5.3
Columbia							
Cooperatives	7.7	17.6	7.1	5.9	3.7	11.1	46.9
Total assets	1.3	19.0	5.6	15.8	40.5	5.6	12.4
Louisville							
Cooperatives	13.0	14.6	10.5	8.9	8.2	25.5	19.3
Total assets	4.7	16.6	33.8	4.9	9.3	11.8	18.9
Jackson							
Cooperatives	8.5	7.8	9.3	3.4	7.4	21.5	42.1
Total assets	28.3	6.8	25.6	2.7	2.3	18.7	15.5
St. Louis							
Cooperatives	11.2	9.7	5.4	13.2	13.3	17.1	30.0
Total assets	2.7	27.7	27.5	14.1	13.2	8.9	6.0
St. Paul							
Cooperatives	8.0	9.7	9.0	10.0	10.2	16.6	36.5
Total assets	3.8	36.1	20.7	9.1	7.5	10.1	12.6
Omaha							
Cooperatives	5.7	4.4	11.2	8.1	16.6	21.8	32.3
Total assets	2.7	4.1	18.9	16.0	19.5	22.6	16.0
Wichita							
Cooperatives	14.8	13.8	12.8	13.7	13.2	16.5	15.2
Total assets	7.6	27.2	7.7	30.9	7.1	12.5	6.9
Texas							
Cooperatives	19.5	5.7	3.0	4.9	10.1	22.5	34.4
Total assets	4.5	11.8	41.9	2.6	7.8	18.6	12.9
Sacramento							
Cooperatives	4.0	16.9	3.9	12.0	9.9	23.3	30.0
Total assets	7.0	37.3	7.1	13.5	20.6	8.8	5.7
Spokane							
Cooperatives	11.8	8.7	6.3	15.8	11.4	16.5	29.4
Total assets	4.5	29.5	6.7	19.9	7.5	17.3	14.5
All districts							
Cooperatives	10.1	9.7	8.7	9.7	11.7	19.1	30.9
Total assets	4.6	28.7	20.8	12.1	12.2	11.4	10.2

[1] Interest expense used to compute this ratio was estimated by multiplying total borrowed capital outstanding at the end of the fiscal year by an average of seasonal and term interest rates charged by the Banks for Cooperatives during the year.
[2] May not add to 100 percent due to rounding.

Table 42—Frequency distribution of total debt, total borrowed capital, and borrowed capital from Banks for Cooperatives according to debt/equity ratio, by farm credit district, fiscal 1987

Farm credit district	Debt/equity ratio: Less than 0.25	0.25 - 0.49	0.50 - 0.99	1.00 - 1.99	2.00 - 2.99	3.00 and over
	Percent [1]					
Springfield						
Total debt	0.3	0.2	0.9	21.7	0.8	76.2
Total borrowed capital	0	0.2	0.8	20.3	0.3	78.4
Banks for Cooperatives	0	0.5	1.7	60.2	0.3	37.3
Baltimore						
Total debt	1.8	2.2	9.6	67.0	0.4	19.0
Total borrowed capital	0.2	1.0	7.7	80.7	0.2	10.2
Banks for Cooperatives	0	1.0	6.6	89.3	0.1	2.9
Columbia						
Total debt	0.2	0.4	3.3	56.0	27.1	13.0
Total borrowed capital	0.1	0.1	2.5	58.0	25.5	13.9
Banks for Cooperatives	0.1	0.1	4.5	21.7	46.9	26.8
Louisville						
Total debt	1.9	3.8	8.8	45.1	13.2	27.2
Total borrowed capital	0.6	4.1	13.2	54.4	27.6	0
Banks for Cooperatives	0.7	4.7	16.1	51.6	26.9	0
Jackson						
Total debt	4.8	3.1	47.0	19.6	20.7	4.9
Total borrowed capital	0.7	0.8	53.7	21.7	18.3	4.7
Banks for Cooperatives	0.9	1.0	40.3	33.8	23.1	0.9
St. Louis						
Total debt	1.8	3.0	35.6	53.3	5.3	1.0
Total borrowed capital	0.6	1.9	32.5	58.2	5.6	1.3
Banks for Cooperatives	1.2	3.6	26.0	64.4	2.7	2.1
St. Paul						
Total debt	2.5	5.6	13.3	68.8	6.7	3.1
Total borrowed capital	0.6	3.6	11.8	75.3	7.1	1.6
Banks for Cooperatives	0.7	4.1	11.8	75.1	7.5	0.9
Omaha						
Total debt	5.0	20.5	33.5	36.9	3.0	1.1
Total borrowed capital	1.7	15.7	30.8	49.1	2.7	0
Banks for Cooperatives	1.7	17.1	33.1	45.9	2.2	0
Wichita						
Total debt	3.2	9.0	22.6	32.8	29.4	3.1
Total borrowed capital	1.3	6.5	21.5	28.8	38.7	3.3
Banks for Cooperatives	1.2	6.3	19.5	24.9	45.7	2.4
Texas						
Total debt	3.2	9.7	13.1	12.5	60.6	0.8
Total borrowed capital	0.6	4.7	13.0	16.6	64.3	0.8
Banks for Cooperatives	0.8	3.2	7.8	15.9	71.9	0.4
Sacramento						
Total debt	0.4	1.2	3.9	23.9	30.8	39.8
Total borrowed capital	0.1	0.6	3.4	21.2	23.7	51.0
Banks for Cooperatives	0.2	1.0	2.6	19.8	16.1	60.4
Spokane						
Total debt	2.6	6.6	15.8	21.3	9.5	44.1
Total borrowed capital	1.1	5.6	8.6	14.2	6.3	64.2
Banks for Cooperatives	1.5	6.3	8.2	16.8	6.5	60.6
All districts						
Total debt	1.9	4.5	15.1	40.5	15.0	23.0
Total borrowed capital	0.5	2.9	14.1	41.1	15.7	25.7
Banks for Cooperatives	0.7	3.9	13.3	44.6	18.5	19.0

[1] May not add to 100 percent due to rounding.

only about a tenth of total cooperative assets. More than one-half of the cooperatives in the dairy; livestock, wool, and poultry; miscellaneous marketing; and service groups held no borrowed capital, although the percentage of total cooperative assets these cooperatives represented generally was proportionately smaller. However, miscellaneous marketing cooperatives with no borrowed capital represented 87.4 percent of total assets for that commodity group.

Nearly one-fifth of all cooperatives had interest coverage ratios of 10 or more, and these cooperatives represented more than one-tenth of total cooperative assets. These cooperatives could meet interest expenses at least 10 times in 1987. One-tenth of all cooperatives had interest coverage ratios of less than 1.0, although they represented only 4.6 percent of total cooperative assets. In 1987, these cooperatives could not have met their interest expenses from net margins.

Table 34 demonstrates the relationship between cooperative size and the current ratio. Whereas 43.1 percent of the cooperatives and 33.6 percent of the assets held by cooperatives with total assets of less than $500,000 corresponded to current ratios of 5 or more, 72.6 percent of the cooperatives and 60.7 percent of the assets of cooperatives with assets of $500 million or more corresponded to current ratios of less than 1.50.

Table 37 demonstrates the relationship between cooperative size and the debt/equity ratio. Whereas 51.4 percent of the cooperatives and 49.2 percent of the assets held by cooperatives with total assets of less than $500,000 correspond to debt/equity ratios of less than 0.25, 25.0 percent of the cooperatives and 33.6 percent of the assets held by cooperatives with total assets of $500 million or more corresponded to debt/equity ratios of 3.00 or more.

Table 42 shows the distribution of total debt, total borrowed capital, and borrowed capital from BCs according to the cooperatives' debt/equity ratio by farm credit district. This table provides insight into the financial condition of cooperatives holding debt and the distribution of risk among all lenders and the BCs.

Overall, table 42 indicates BCs holding a fairly even share of borrowed capital among cooperatives in different debt/equity classifications, with somewhat less of a share among the cooperatives with the highest debt/equity ratios. Although, the Springfield district had the highest proportion of total borrowed capital held by cooperatives with debt/equity ratios of 3.00 and over, the BC had only 37.3 percent of their loans placed with cooperatives in that category, compared with 78.4 percent of borrowed capital from all lenders.

CONCLUSIONS

The need for this report stems from the changes in the economic environment, large operating losses experienced by many cooperatives, and the significant restructuring that has occurred since the 1976 financial profile of farmer cooperatives. Since then, the number of cooperatives has declined significantly, although total sales and total assets have increased. Net margins after losses more than doubled in 1987 from the previous year, reaching their highest level since 1980 and marking the first major reversal in recent declines associated with the agricultural recession of the 1980's. Nonetheless, they fell short of those for 1976.

Since 1976, cooperative assets increased 49 percent, with marketing cooperatives increasing the fastest. From 1976 to 1987, marketing cooperatives doubled their assets, and their share of total cooperative assets increased from 35 percent to 49 percent.

The proportion of intercooperative investment has continued to increase. In 1987, investments were 10.2 percent of assets or $2.8 billion. Local supply cooperatives have 21 percent of their assets in investments in other cooperatives, and regional supply cooperatives have cooperative investments equal to 13 percent of assets.

Subtracting intercooperative investments from total assets to eliminate accounting duplication leaves $24.8 billion net cooperative assets.

Patronage refunds from other cooperatives has been an important element of overall cooperative net margins. However in 1987, patronage refunds between cooperatives was only $62 million, down from more than $500 million in 1976.

Fewer cooperatives deducted per-unit capi-

tal retains in 1987, but the amount of retains deducted exceeded the amount deducted in 1976. However, most per-unit capital retains were deducted by fruit, vegetable, and nut marketing cooperatives and dairy marketing cooperatives. Few farm supply cooperatives made capital retain deductions.

Examination of the distribution of net margins indicates recent reductions in the proportion distributed as dividends on patron equity as well as declines in the percentage of cash and noncash patronage refunds. Most significant is the extremely large difference in the percentage of net margins distributed to unallocated equity accounts. The 27.4 percent of net margins retained as unallocated equity in 1987 was more than three times greater than the proportion assigned to unallocated equity in any other financial profile year. More cooperatives that reported net margins retained unallocated equity than paid patronage refunds. In part, as a result of this, the percentage of net margins paid as income taxes also was larger.

As a result of the decline in operating results and the decrease in the proportion of net margins distributed as dividends on patron equity and cash and noncash patronage refunds, both the cash benefits paid to patrons and the allocated equity invested by patrons were less in 1987 than in 1976. Whereas cash benefits declined 31.1 percent and noncash patronage refund allocations declined 43.9 percent, unallocated earnings increased 174.9 percent.

The most popular and important method of distributing net losses was to write them off against unallocated equity accounts. Eighty-four percent of the cooperatives with losses wrote them off against unallocated equity accounts, accounting for 82.6 percent of all losses. Most of the remaining losses were charged against patron allocated equity accounts. In only a few cases were patrons billed or were the charges deducted from marketing proceeds due patrons.

The proportion of total equity capital held in unallocated form has risen consistently since 1954. In 1987, 20.7 percent of all equity was unallocated, representing a 37.1 percent increase since 1976. Increases in the proportion of equity held in unallocated form and the percentage of net margins distributed as unallocated earnings suggest that cooperatives are relying more heavily on unallocated equity in their financial structure. This may stem from the reluctance of many cooperatives to burden patrons directly with the heavy losses the cooperatives incurred during the early 1980's when many patrons also were experiencing financial difficulties. The data for 1987 indicate that cooperatives are continuing to rebuild their unallocated equity bases beyond 1976 levels and that a greater proportion of 1987 losses were charged against unallocated reserves. These data suggest that the experiences of the early 1980's may have changed cooperative practices, due in part to changes in expectations about future losses.

The share of total assets financed with equity capital increased considerably since 1976. The 1970 and 1976 proportions of assets financed with equity capital represented large drops from the levels of equity capitalization found in 1954 and 1962. The increase between 1976 and 1987, which brought the proportion of assets financed by equity to 46.4 percent, represented in part an attempt by many cooperatives to rebuild their balance sheets after the losses in the early 1980's, which were exacerbated by high interest rates and the high levels of borrowed capital taken on during the 1970's.

The proportion of borrowed capital peaked in 1976 at 33.1 percent. The levels of borrowed capital in 1970 and 1976 represented significant increases over the amount of borrowed capital held in 1954 and 1962. The 26.3 percent share of assets financed with borrowed capital in 1987 is closer to those earlier levels.

Significant changes also have occurred in the sources of borrowed capital. More cooperatives borrowed capital from BCs than from any other source. Sixty-seven percent of the cooperatives with borrowed capital, or 46 percent of all cooperatives, held loans from BCs. Less than a third of cooperative borrowers acquired capital from commercial banks, bonds and notes, or other sources. Commercial banks supplied more than 8 percent of total borrowed capital but were more important for small cooperatives under $500,000 assets. For these cooperatives, they supplied 39 percent of borrowed capital.

BC loans still provide over half of the capital borrowed by cooperatives. However, the BCs' 51.3 percent share in 1987 represented a substantial reduction from the 62.2 percent share in

1976 although it still was greater than that in 1954 and 1962. The share of borrowed capital provided by commercial banks has been fairly stable, but the share supplied by debt securities has gradually declined since 1954.

The largest increase in share belonged to other sources. The proportion of borrowed capital provided by other sources grew from 9.4 percent in 1976 to 25.7 percent in 1987. Because other sources included capitalized leases placed by BCs, the 51.3 percent BC loan share underrepresents total BC involvement in the financing of cooperatives.

There is significant variation in the income situation and financial structure of cooperatives among various product and function groups, regions, and size categories. The very largest cooperatives, those with total assets of $500 million or more, are exceptional by how their borrowing sources differ from other cooperatives. These eight cooperatives received only 36 percent of their borrowed capital from banks, compared with 71 percent for all other cooperatives. The largest eight cooperatives received 64 percent of their borrowed capital from bonds and notes and from other sources.

In total, there has been a general strengthening in balance sheets as evidenced by the current and debt/equity ratios since 1976. However, the interest coverage ratio indicates a deterioration in the ability of cooperatives to make interest payments as a result of comparatively lower earnings and higher interest rates. On average, smaller cooperatives had the strongest financial ratios. But within the groups of smaller cooperatives was the largest proportion of cooperatives unable to cover their current interest expenses.

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APPENDIX

Appendix table 1—Cooperatives included in population and sample, by principal product or function

Principal product or function	Population				Observations			
	Group 1[1]	Group 2[2]	Group 3[3]	Total	Group 1	Group 2	Group 3	Total
	Number							
Cotton marketing	9	11	0	20	9	2	0	11
Cotton ginning	4	326	0	330	4	142	0	146
Dairy	73	171	0	244	59	42	0	101
Fruits, vegetables, nuts	51	223	0	274	48	92	0	140
Regional grain	9	0	0	9	9	0	0	9
Local grain	168	1,339	31	1,538	151	406	31	588
Sugar	12	8	0	20	11	5	0	16
Livestock, wool, poultry	26	83	0	109	23	30	0	53
Miscellaneous marketing	9	58	0	67	9	38	0	47
Interregional mfg.	6	0	0	6	6	0	0	6
Regional farm supply	11	0	0	11	10	0	0	10
Local farm supply	78	1,546	211	1,835	68	556	211	835
Service	2	105	0	107	2	61	0	63
Large diversified	3	0	0	3	3	0	0	3
All products/functions	461	3,870	242	4,573	412	1,374	242	2,028

[1] Annual sales equal to or greater than $15 million.
[2] Annual sales less than $15 million.
[3] Data supplied by centralized accounting source.

Appendix table 2—Frequency distribution of cooperatives according to sales, by principal product or function, fiscal 1987

Principal product or function	Cooperatives	Total sales: Less than $500,000	$500,000 - $999,999	$1 - 4.9 million	$5 - 9.9 million	$10 - 24.9 million	$25 - 99.9 million	$100 - 499.9 million	$500 million and over
	Number	*Percent*[1]							
Cotton marketing	20	0	0	0	0	60.0	25.0	10.0	5.0
Cotton ginning	330	15.6	22.8	49.9	8.6	2.9	0	0.3	0
Dairy	244	4.3	0	40.3	14.5	14.9	9.2	13.1	3.7
Fruits, vegetables, nuts	274	8.1	10.4	26.7	18.2	18.7	11.8	5.0	1.1
Regional grain	9	0	0	0	0	0	11.1	22.2	66.7
Local grain	1,538	1.9	4.2	36.8	33.7	18.9	4.4	0.1	0
Sugar	20	0	0	0	8.0	37.0	31.7	23.3	0
Livestock, wool, poultry	109	26.4	3.7	33.2	6.6	9.9	12.2	8.0	0
Miscellaneous marketing	67	19.1	4.5	49.6	11.2	4.5	8.1	3.0	0
Interregional mfg.	6	0	0	0	0	0	16.7	50.0	33.3
Regional farm supply	11	0	0	0	0	0	0	57.8	42.2
Local farm supply	1,835	3.8	9.2	57.6	18.6	9.1	1.8	0	0
Service	107	35.1	15.3	26.2	15.0	7.4	0.9	0	0
Large diversified	3	0	0	0	0	0	0	0	100.0
All products/functions	4,573	5.7	7.9	45.0	22.0	13.0	4.1	1.7	0.7

[1] May may not add to 100 percent due to rounding.

Appendix table 3—Frequency distribution of cooperatives according to total assets, by principal product or function, fiscal 1987

Principal product or function	Cooperatives	Total assets: Less than $500,000	$500,000 - $999,999	$1 - 2.4 million	$2.5 - 4.9 million	$5 - 9.9 million	$10 - 24.9 million	$25 - 99.9 million	$100 - 499.9 million	$500 million and over
	Number	*Percent*[1]								
Cotton marketing	20	0	0	0	0	55.0	20.0	20.0	5.0	0
Cotton ginning	330	22.4	27.7	32.7	10.4	4.6	2.0	0	0.3	0
Dairy	244	30.6	17.2	19.6	9.2	3.4	4.0	10.3	5.7	0
Fruits, vegetables, nuts	274	27.2	16.9	16.8	15.3	9.1	6.2	4.0	4.1	0.4
Regional grain	9	0	0	0	0	0	0	33.3	66.7	0
Local grain	1,538	6.2	8.9	42.4	25.7	13.5	3.0	0.4	0	0
Sugar	20	0	6.7	0	8.0	32.0	11.7	30.0	11.7	0
Livestock, wool, poultry	109	57.8	12.4	15.1	3.9	2.1	6.0	2.8	0	0
Miscellaneous marketing	67	37.4	15.6	21.1	11.1	6.0	5.1	1.5	2.2	0
Interregional mfg.	6	0	0	0	0	0	0	33.3	50.0	16.7
Regional farm supply	11	0	0	0	0	0	0	47.8	29.2	23.0
Local farm supply	1,835	17.9	19.1	35.6	19.3	6.9	1.2	0	0	0
Service	107	38.8	17.2	17.1	19.5	1.3	6.1	0	0	0
Large diversified	3	0	0	0	0	0	0	0	0	100.0
All products/functions	4,573	17.0	15.5	34.0	19.3	8.9	2.7	1.5	1.0	0.2

[1] May not add to 100 percent due to rounding.

Appendix table 4—Frequency distribution of cooperatives according to farm credit district, by principal product or function, fiscal 1987

Principal product or function	Farm credit district											
	Springfield	Baltimore	Columbia	Louisville	Jackson	St. Louis	St. Paul	Omaha	Wichita	Texas	Sacramento	Spokane
	Number											
Cotton marketing	0	0	0	0	2	11	0	0	1	4	2	0
Cotton ginning	0	0	2	0	46	0	0	0	48	194	40	0
Dairy	35	15	7	9	2	9	125	14	0	3	15	10
Fruits, vegetables, nuts	22	14	41	11	0	6	18	0	16	5	102	39
Regional grain	0	0	0	2	0	2	1	1	1	0	2	0
Local grain	0	0	2	104	21	185	374	427	272	63	10	80
Sugar	0	0	2	0	9	0	3	1	0	1	4	0
Livestock, wool, poultry	11	10	5	16	12	12	17	9	4	2	10	1
Miscellaneous marketing	3	3	14	15	0	2	9	1	2	0	14	4
Interregional mfg.	0	0	1	0	1	1	1	0	1	0	1	0
Regional farm supply	0	1	0	1	2	6	1	0	0	0	0	0
Local farm supply	94	105	16	184	144	195	523	287	80	46	40	121
Service	7	9	4	18	7	6	24	5	3	5	15	4
Large diversified	1	0	1	0	0	0	1	0	0	0	0	0
All products/functions	173	157	95	360	246	435	1,097	745	428	323	255	259

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The agency (1) helps farmers and other rural residents develop cooperatives to obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs.

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